Survey_Results

Item_Type Article

Title ABI STUDY SEES MAJOR GLOBAL EXPANSION FOR DG

Author

Publication_Name Power Engineering, Jul2002, Vol. 106 Issue 7, p53, 1/4p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Focuses on a study which predicted an increase in global distributed generation capacity by 2011. Implicati the findings of the study; Growth rates for quality power and industrial power supply markets.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title All EPRI 2003 Research Areas (Programs)

Author

Publication_Name EPRI

Reference http://www.epri.com/targetlistall.asp

Abstract List of All EPRI 2003 Research Areas (Programs) Key: PID = Products in Development, TR = Technical Reports, SW = Software

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☑

Title DG EMISSIONS AND EFFICIENCY.

Author Harris, Louis; Rosenstock, Steven

Publication_Name Electric Perspectives, May/Jun2002, Vol. 27 Issue 3, p110, 2p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Deals with the comparative challenges of contrasting the environmental advantages of various distributed generation (DG) systems with different types of central-station powerplants. Analysis of diesel power emis Efficiency of central-station powerplants; Benefit from reusing industrial heat for power generation.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title Distributed Generation Applications

Author

Publication_Name Distributed-Generation.com

Reference http://www.distributed-generation.com/applications.htm

Abstract There are nine major customer DG applications:
Allowing customers to continuously generate their own electricity, with or without grid backup,
Permitting customers to generate power while serving their thermal and/or cooling loads,
Generating a portion of electricity onsite to reduce the amount of electricity purchased during peak price pe
Licensing customers to sell excess generation back onto the grid when their own demand is low, especiall during peak pricing periods,
Using standby or emergency power to backup grid based power,
Improving customer power quality and reliability,
Serving niche applications, such as "green" power or remote power,
Meeting continuous power, premium power, or cogeneration needs of the residential market.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Survey_Results

Item_Type Article

Title	Distributed Generation Market Forecasts
Author	
Publication_Name	Distributed-Generation.com
Reference	http://www.distributed-generation.com/market_forecasts.htm
Abstract	The potential market size forecast for DG varies by application. The following table indicates the approximat of some key U.S. markets, for a few of the customer applications. Any forecast depends greatly on the exp DG capital cost, future fuel cost, and the technology's energy efficiency.

Rating: 5 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	Distributed Generation Regulations
Author	
Publication_Name	Distributed-Generation.com
Reference	http://www.distributed-generation.com/regulations.htm
Abstract	The regulatory environment surrounding DG is evolving rapidly. New interconnection standards, environmen regulations, and net metering rules are promulgated each month. These are summarized here. State Regulations - Existing and emerging state regulations that affect the use of DG. Regulatory Issues - Energy provider and energy customer issues that need to be kept in mind by regulators policymakers. Power Marketing Licensing Requirements - This page lists state regulations affecting power marketers seek to retail power.

Rating: 5 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	Distributed Generation Technologies
Author	
Publication_Name	Distributed-Generation.com
Reference	http://www.distributed-generation.com/technologies.htm
Abstract	The portfolio of DG technologies includes reciprocating engines, microturbines, combustion gas turbines (including miniturbines), fuel cells, photovoltaics, and wind turbines. Each technology has varying character and emission levels. Descriptions of each technology are provided below, but first the following table summ some of the key specifications.

Rating: 5 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	EEI PAPER CHALLENGES DG ENVIRONMENTAL ADVANCES.
Author	
Publication_Name	Power Engineering, Jul2002, Vol. 106 Issue 7, p54, 3/4p
Reference	http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite
Abstract	Focuses on a paper authored by two Edison Electric Institute managers which questions the environmental advantages attributed to distributed generation (DG). Percentage of back-up onsite generation units that run diesel fuel; Comparison of emissions between a natural gas-based DG system and a coal-based plant; Ben reusing industrial heat for power generation.

Rating: 5 ***Available Electronically*** ☑ ***Fee Required*** ☐

Survey_Results

Item_Type Article

Title Embedded generation and distribution

Author Amanda Seaton

Publication_Name Power Economics, Nov2002, Vol. 6 Issue 10, p22, 3p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Reports that distributed generation or embedded generation has the potential to contribute to British climate change commitments. Connection of embedded generation to the low voltage distribution network; Review c relationship between embedded generation and distribution network businesses; Removal of barriers to ent embedded generation; Climate change policy.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title Energy Analysis Seminar Series Archive

Author

Publication_Name NREL

Reference http://www.nrel.gov/analysis/archive.html

Abstract An archive area, featuring information from our top-notch speakers. From this list, you can access presenta and a short write-up highlighting topics of current interest (including subjects such as greenhouse gases, distributed generation, and new analysis models) from these past sessions.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title Impact of DG on Reliability

Author Roger Dugan

Publication_Name Transmission & Distribution World, Oct2002, Vol. 54 Issue 10, p50, 4p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Discusses the impact of distributed generation (DG) of electric power on reliability of the distribution system Relationship between DG and utility-distribution system; Significance of DG in improving the reliability for rem loads; Application of DG to utility engineers.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title Let the Real Work Begin

Author Rick Rush

Publication_Name Transmission & Distribution World, Oct2002, Vol. 54 Issue 10, p4, 2p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Focuses on the distributed generation (DG) of electric power in the U.S. Description of American Electric Pc Co. in Columbus, Ohio; Utility of Detroit and parent-company DTE Energy Co. in Detroit, Michigan in electric power; Monitor index of DG.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title NATION'S LARGEST OFFICE OWNER HIGH ON DG.

Author

Publication_Name Power Engineering, Nov2002, Vol. 106 Issue 11, p156, 3p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Discusses the program of Equity Office Properties Trust (EOP) company to incorporate distributed electric generation into its commercial office properties in the U.S. Criteria used by EOP in the selection of its proper to include in the program; Details of some distributed generation projects of EOP at its office properties; Crea of the On-Site Energy Providers LLC by EOP.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Survey_Results

Item_Type Article

Title Power Quality and Reliability Issues

Author

Publication_Name EERE - DER

Reference http://www.eere.energy.gov/der/quality_reliability.html

Abstract Power quality is an important concern for today's power grid and the loads that it serves. Computer equipme particular is sensitive to power quality problems, and the ubiquity of computers in today's manufacturing environment means that high power quality is becoming important to a wide number of commercial and indus firms, as well as the average homeowner.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title Primen Solutions Distributed Energy - Distributed Energy Strategic Service

Author

Publication_Name PRIMEN

Reference http://www.primen.com/index.asp

Abstract Primen's Distributed Energy Strategic Service tracks and analyzes important emerging trends in distributed generation and storage — including microturbines, fuel cells, reciprocating engines, Stirling engines, small g turbines, battery-less storage, cogeneration packages, and photovoltaics. Through an integrated package c reports, primary research, networking opportunities, and access to Primen experts, subscribers receive det exclusive information from an independent, fuel-neutral perspective to help separate the hype from the reali the evolving distributed energy market.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☑

Title Strict NOx Emission Limits Planned for On-Site Power Units

Author Susan Bassett

Publication_Name Pollution Engineering, Jul2001, Vol. 33 Issue 6, p8, 2p, 1 chart, 1c

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Examines the effect of nitrogen oxide emission on the quality of air in the United States. Impact of on-site generation on the degradation of air quality; Regulation of the distributed generation of air; Efforts of the Ozo Transport Commission.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title The Office of Distributed Energy Resources (DER)

Author

Publication_Name EERE - DER

Reference http://www.eere.energy.gov/der/

Abstract The nation's electricity delivery system is straining in the face of escalating demand for power. Electricity shortages, power quality problems, rolling blackouts, and electricity price spikes are endemic.
To meet the country's need for high-quality, reliable electricity, distributed energy resources (DER) offer a fa less expensive alternative to the construction of large, central power plants and high-voltage transmission li The U.S. Department of Energy's Office of Distributed Energy Resources is working with industry stakehold to streamline the integration of distributed energy systems with the electricity grid.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Survey_Results

Item_Type Article

Title WIN/WIN BUSINESS MODEL NEEDED TO ADVANCE DG.

Author Steve Blankenship

Publication_Name Power Engineering, Jun2002, Vol. 106 Issue 6, p60, 3p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Presents the core conclusions of Emerson regarding the nature of the distributed generation market of elect and what is needed to advance them.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title Winding Arrangements for Distributed Generation.

Author Wayne Hartman

Publication_Name Consulting-Specifying Engineer, Nov2002 Supplement, Vol. 32 Issue 5, p16, 6p, 7 diagrams

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Focuses on the role of winding arrangements in the success of distributed generation designs. Incorporatic distributed generation into a power system; Definition of the interconnection-transformer winding arrangeme Impact of winding arrangement on electric utilities.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title Allied Business INTELLIGENCE Fuel Cells and Energy SUBSCRIPTION SERVICE

Author ABI

Publication_Name ABI

Reference http://www.alliedworld.com/pdfs/ca01sbr.pdf

Abstract The energy industry has been undergoing a decade of critical transition. While energy requirements rise as nation's consumption levels increase, new energy sources and technologies are required to be more efficie than those currently available.
ABI is the premium source for market research covering fuel cells and other renewable energy technologies Reports from ABI focus on regional markets as well as different market segments. Our research includes findings and information that are not readily available to others -- a critical benefit for our clients. ABI's fuel c studies supply tactical and strategic intelligence, so that clients in the automotive, wireless, and power gene industries, among others, can benefit ahead of their competitors.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title Alternative energy: microturbine, solar power, fuel cells.

Author

Publication_Name Fairfield County Business Journal, 03/05/2001, Vol. 40 Issue 10, p13, 2p

Reference http://www.powerlibrary.net/Remote/Remote.asp Regional Business News

Abstract Reports on the Capstone Turbine Corp.'s commercial power products utilizing the microturbine technology. Enertec's regional distribution of Capstone's MicroTurbine power generation system; Features and capabiliti the Capstone microturbine system; Target business segments for the use of microturbine as alternative ene source.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Item_Type Article

Title	BIOENERGY COMES OF AGE...AND THE TIMING IS PERFECT
Author	Jerome Goldstein
Publication_Name	BioCycle, Nov2002, Vol. 43 Issue 11, p56, 3p
Reference	http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite
Abstract	Discusses highlights of the Bioenergy for the Environment conference held in Boise, Idaho, in October 2002. Conference sessions on anaerobic digestion, chemical by-products and co-products, climate change, distril generation and green energy programs; Commercial companies that have ventured into bioenergy; Biobased products featured at the conference. INSET: BIOBASED PRODUCTS HIT THE MARKETPLACE.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title	California Distributed Energy Resources Guide
Author	
Publication_Name	CEC DER
Reference	http://www.energy.ca.gov/distgen/index.html
Abstract	A public benefit site containing a wealth of information regarding distributed energy resources (DER). Distrib energy resources are small-scale power generation technologies (typically in the range of 3 to 10,000 kW) located close to where electricity is used (e.g., a home or business) to provide an alternative to or an enhancement of the traditional electric power system.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title	Caterpillar Introduces New Generator Sets
Author	
Publication_Name	Journal Star, 12/17/2002
Reference	http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source
Abstract	Dec. 17--PEORIA, Ill.--Caterpillar Inc. has introduced its new natural-gas fueled generator sets, which offer efficiency, low emissions, and low electricity cost in distributed generation service. The new Cat G3500 Se generator sets deliver electricity at the lowest cost per kilowatt-hour in extended-duty distributed generatior service in both island mode and grid parallel operations, according to company officials. The first unit in the series, the G3520C, made its debut Dec. 10-12 at the POWER-GEN International 2002 in Orlando. The new generator set series fills an emerging need in the distributed generation market, officials say, which is grow rapidly as utilities see its potential as a quick, low-risk way to bolster power supplies and as a tool to stabiliz voltage on local distribution systems.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title	DG Comes to Detroit Edison
Author	Rich Seguin
Publication_Name	Transmission & Distribution World, Oct2002, Vol. 54 Issue 10, p21, 5p
Reference	http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite
Abstract	Focuses on the development of an application engineering associated with distributed generation (DG) by DT Energy Co. and the electric utility Detroit, Michigan-based company Detroit Edison Corp. Impact of DG on the electrical system; Problems in the integration of DG into Detroit Edison distribution planning and operating process; Installation of four DG projects by Detroit Edison.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Survey_Results

Item_Type Article

Title DG emissions and efficiency Jun 04 - Electric Perspectives

Author Louis Harris, Steven Rosenstock

Publication_Name CyberTech Inc

Reference http://www.netl.doe.gov/scng/news/2002/pdf/DG.PDF

Abstract Distributed generation's (DG'S) environmental bearing-in general and on air quality in particular-is site-specif and rarely unambiguous. While DG systems can produce fewer emissions and are cleaner than older centra station power generation, state environmental regulators are starting to focus on DG emissions. There also be local regulators, especially in those cities classified as nonattainment areas by the Environmental Protecti Agency (EPA) that could become more involved as more DG is used.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title DG WILL BENEFIT FROM CONTINUED MOVE TOWARD UNIFORM TRANSMISSION ACCESS

Author Blankinship, Steve

Publication_Name Power Engineering, May2002, Vol. 106 Issue 5, p52, 3/4p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Reports on the plan of the U.S. Federal Energy Regulatory Commission (FERC) to continue efforts to remove transmission and distribution of barriers for distributed resources at the wholesale and retail levels. Reason the support to distributed generation resources; Scope of the authority given to the FERC; Plan of the commission to define an open access tariff.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Distributed Energy Markets Expanding at Time of Uncertainty

Author Scott Sklar

Publication_Name Energy Pulse

Reference http://www.energypulse.net/centers/article/article_print.cfm?a_id=60

Abstract As states have begun a march towards on-and-off deregulation or reregulation, the US market has picked-u distributed generation in a big way. Prior, the international markets have been the mainstay for distributed generation technologies from diesels and reciprocating engines to battery banks and photovoltaics. The international markets for distributed generation have been telecommunications, (primarily cellular and redund systems), uninterruptible power systems for banking and government, and back-up systems for the tourism industries.
But as the U.S. grid begins to age and regulatory swings slow investment into transmission and distribution infrastructure expansion and upgrades, distributed generation has taken on new significance in the U.S. domestic marketplace. The electric utility industry primarily relies on the traditional distributed generation solutions utilizing reciprocating engines with some experimentation in microturbines, fuel cells and photovolt Basic prime drivers for distributed generation vary.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Article

Title Distributed Energy Resource Environmental Benefits/Impacts An E2I Initiative

Author

Publication_Name EPRI

Reference http://www.epri.com/corporate/products_services/project_opps/DR/1007077.pdf

Abstract Distributed resource (DR) technologies, such as small gas turbines, microturbines, fuel cells, fuel cell vehicl and photovoltaics, have the potential to become a significant source of electricity generation in the next few DR offers the advantage of being small, modular and physically close to the customer, serving as an alterna or supplement to centralized generation. Though expanding DR technologies offer tremendous opportunities potential environmental benefits, their widespread use as an energy source is relatively new and the environmental implications of increasing DR deployment are not fully known. The consequences of failing to understand and address the environmental implications before wide-scale deployment of new technologies be severe.
E21 seeks to address these potential implications by studying the environmental impacts of DR and developi solutions while DR deployment is still in its early stages. Unlike centralized generation, DR technologies are located near to or within population centers. Additionally, emissions from many DR technologies occur at or to ground levels. The environmental and health impacts resulting from the emission of a given pollutant can b much more significant at ground levels in populated areas compared with equivalent emissions from tall sta centralized power-generating facilities located farther from population centers. The potential environmental benefits of some DR technologies, such as very low emissions from fuel cells, and combined heat and pow have generally been recognized for some time. However, there is an increasing need for a comprehensive analysis of the whole range of environmental implications caused by DR to reduce or eliminate negative environmental effects of its widespread deployment.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☑

Title Distributed Energy Resources Interconnection and Integration An E21 Initiative

Author

Publication_Name EPRI

Reference http://www.epri.com/corporate/products_services/project_opps/DR/1007076.pdf

Abstract Distributed resource (DR) technologies, such as photovoltaics, small gas turbines, microturbines, and fuel c can serve as alternatives to centralized power generation. Small and modular, and close to the electricity customer, over the next several years DR technologies can be expected to be more widely used if operatio obstacles can be addressed. Although DR has been interconnected safely and successfully for decades, interconnection remains a significant issue influencing its long-term prospects. This evidences a growing ne understand the impacts of these resources and how to better integrate and leverage DR systems with elec power systems (EPS) and with endusers. E21 proposes to bridge the existing gaps by bringing together ke stakeholders from the DR business conmlunity, utilities, state regulators, and others to work in collaboration solve these problems. If DR is to be successful in the electricity supply and delivery enterpnse, then simple, standardized ways of integrating it into power systems will be crucial.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☑

Title Distributed Energy Resources Market Structure/Price Signals An E21 Initiative

Author

Publication_Name EPRI

Reference http://www.epri.com/corporate/products_services/project_opps/DR/1007078.pdf

Abstract The manner in which the electricity industry has been built and historically operated—-to suit customer nee under a heavily regulated, vertically integrated market has resulted in market barriers preventing distributed energy resources (DR) from meeting today's needs. An updated, transparent market structure, enabling a p link between demand and supply, is required to allow DR to provide maximum value to customers. Research pricing signals could lead the way for more efficient deployment of grid resources while potentially enhancin applications. Standardized regulations towards DR, developed from examining and adopting best practices, would also greatly enhance the market potential for DR technologies.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☑

Survey_Results

Item_Type Article

Title Distributed Energy Resources Public/Private Partnership An E21 Initiative

Author

Publication_Name EPRI

Reference http://www.epri.com/corporate/products_services/project_opps/DR/1007272.pdf

Abstract DR OVERVIEW AND ISSUES The deployment of distributed energy resources (DR) has lagged far behind the expectations of users, vendors, and venture capitalists. Strong, viable technologies are available. However installation and integration into the power grid is not always easy, inexpensive, straightforward, or even predictable. This initiative is aimed at assembling key public and private stakeholders to work collaboratively solve these issues as rapidly as possible.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☑

Title Distributed Generation Coming Into Focus.

Author Smith, Douglas J.

Publication_Name Power Engineering, Apr2002, Vol. 106 Issue 4, p26, 4p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Discusses the implementation of distributed generation of electric power in the U.S. Historical background; Market and market opportunities; Benefits of distributed generation and distributed resources; Program established by the Los Angeles Department of Water and Power; Aggregation of distributed generation. INSI USERS AND SUPPLIERS OF DISTRIBUTED GENERATION; U.S. ELECTRIC POWER SYSTEM WEAKNESSES; INSTALLED COSTS LOWER WHILE EFFICIENCIES INCREASE: 2000-2020; CHARACTERISTICS AND EMISSION LEVELS FOR VARIOUS DISTRIBUTED…

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title Distributed Generation Poised To Win Over End Users

Author

Publication_Name EnergyUserNews

Reference http://www.energyusernews.com/eun/cda/articleinformation/features/bnp__features__item/0,2584,6725,00

Abstract Distributed generation, known by developers as DG, has suddenly become the "killer application" of the ene industry. If analysts are to be believed, DG will be to the energy industry what the personal computer was t computer industry-both disruptive and enabling, starting a chain of events no-one can accurately predict.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title DTE eyes Engler's alternative-energy plan.

Author

Publication_Name Crain's Detroit Business, 6/17/2002, Vol. 18 Issue 24, p6, 1/3p, 1c

Reference http://www.powerlibrary.net/Remote/Remote.asp Regional Business News

Abstract Reports on the legislation of the alternative-energy plan by the Detroit Area Regional Transportation Authorit Michigan. Reduction of state budget for 2003; Details on the tax exemptions for companies engaged in alterr energy research; Possibility of a power plant driven by hydrogen fuel cells.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Survey_Results

Item_Type Article

Title Electric Power Generation and Management

Author Hashim Nehrir, Victor Gerez, Steve Holland

Publication_Name Montana Business Quarterly, Autumn2002, Vol. 40 Issue 3, p18, 3p, 2bw

Reference http://www.powerlibrary.net/Remote/Remote.asp Regional Business News

Abstract Deals with electric power generation and management. Alternative energy power generation sources; Chall posed by deregulation, rapid technological and population growth, and customer demand to the power indus Implications of energy efficiency and demand management for manufacturing. INSET: Fuel Cell System Instal in Yellowstone Park.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title Electrotek Concepts Contracted to Perform Study on Impacts of Distributed Wind on Utility Systems

Author

Publication_Name Electrotek Concepts

Reference http://www.electrotek.com/pressrel/uwigdist.htm

Abstract Recognizing the emerging popularity of wind as a distributed generation application, a utility wind industry gr has initiated a project to study the impacts of small-scale wind generation on utility distribution networks. The Utility Wind Interest Group (UWIG), a non-profit corporation whose mission is to accelerate the appropriate integration of wind power into the electric system, is providing leadership, technical review, and funding for project, which is receiving financial support from a combination of utility industry groups, research organiza state governments and agencies, and individual utilities.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title Electrotek to participate in Electricity Innovation Institute project to develop architecture for the Electric Syste the Future

Author

Publication_Name Electrotek Concepts

Reference http://www.electrotek.com/pressrel/e2iarch.htm

Abstract Electrotek Concepts, a division of WPT, Inc, has announced that it is part of a team selected by the Electricit Innovation Institute (E2I) to assist in the initial development of an industry wide architecture to meet the emer needs of a digital society. The 18-month, multi-million dollar project will define an overall technical framework the design of communications and intelligent equipment necessary to support the "smart grid" electric syster the future.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title EnergyUserNews MARKETPKLACE 03/03 Statistics, Trends and Energy Data

Author

Publication_Name EnergyUserNews

Reference http://www.energyusernews.com/FILES/HTML/PDF/0303Marketplace.pdf

Abstract Monthly tables of various Statistics, Trends and Energy Data

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Item_Type Article

Title FUEL CELLS NOT PIE-IN-THE-SKY OR PANACEA

Author

Publication_Name Mechanical Engineering, Dec2002, Vol. 124 Issue 12, p22, 1p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Focuses on the possibility of development and uses of fuel cells in the economy. Presence of transport-rela and stationary fuel cells; Working of the cell, according to UTC Fuel Cells; Use of the cells in distributed generation applications; Obstacles in the use of fuel cells in transportation; Comments of critics and suppor on fuel cell usage.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title General Electric Corporate Research and Development Integrating Distributed Generation with Electric Powe

Author

Publication_Name NREL

Reference http://www.nrel.gov/docs/fy03osti/33402.pdf

Abstract Goals: To make large-scale system integration feasible for distributed generators (DGs), a cost-effective, massproduced universal interconnection (UI) system must be developed. General Electric (GE) is examining technical issues associated with interconnecting DG with the electric grid to develop a UI system to facilitate interconnection.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title Getting serious about motley fuels

Author

Publication_Name Red Herring, Jul2002 Issue 115, p70, 2p, 2 charts, 1 graph, 1 map

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Reports on the seriousness of the government and other concerned entities in the United States to develop electric power generation system using renewable sources. Factors that influenced the shift towards distri generation and clean energy; Sense of awareness about electricity usage created by the power crisis in Ca

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title Institute of Electrical and Electronics Engineers Interconnection Standards Development

Author

Publication_Name NREL

Reference http://www.nrel.gov/docs/fy03osti/33405.pdf

Abstract Overview: The use of distributed resources (DR) has the potential to provide more reliable and lower-cost e for electricity customers. This is particularly true for customers with onsite generation.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title Leaders of the pack

Author

Publication_Name NPPC

Reference http://www.nwcouncil.org/library/cq/2002spring/leaderspack.htm

Abstract Reciprocating engines, microturbines and fuel cells have gained the most interest and offer the greatest pote for the future of distributed generation. All of them can be used for cogeneration—besides creating electrici they also can provide thermal energy that can be used to heat water and space—making them extremely ef

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Item_Type Article

Title Manage distributed generation to maximize benefits.

Author Sonderegger, Robert C.

Publication_Name Electrical World, 2002 First Quarter, Vol. 216 Issue 1, p31, 3p, 3 diagrams

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Assesses the applicability of traditional supervisory control and data acquisition systems to handle power production and consumption. Mechanics of the system in energy transformation; Servers for the installation control software; Elaboration of the distributed generation in power configuration.

Rating: 4 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title New York State Energy Research and Development Authority & Electrotek Concepts Aggregating Distributed Generation for Demand Response

Author

Publication_Name NREL

Reference http://www.nrel.gov/docs/fy03osti/33400.pdf

Abstract The New York State Energy Research and Development Authority (NYSERDA) and its subcontractor, Electrotek Concepts, are developing and testing a control and communications system to aggregate distributed resources in a way that maximizes benefits for all parties involved.

Rating: 4 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title NiSource Energy Technologies Optimizing Combined Heat and Power Systems

Author

Publication_Name NREL

Reference http://www.nrel.gov/docs/fy03osti/33406.pdf

Abstract Goals: NiSource Energy Technologies is conducting research and development to evaluate gridconnected aggregated distributed power systems and combining several technologies with dynamic optimization and control of energy use to identify regulatory, integration, and interconnection issues. Its long-term goal is to develop approaches to incorporate distributed generation (DG) systems into the physical design and controls of buil

Rating: 4 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title Orion Engineering Corporation Intelligent Solutions for Distributed Power Technology

Author

Publication_Name NREL

Reference http://www.nrel.gov/docs/fy03osti/33404.pdf

Abstract Overview: The purpose of this research is to demonstrate a neuralnetwork control system for managing small distributed generation (DG). Orion Engineering Corp. (Orion) has developed a system called the Distributed Energy Neural Network Integration System (DENNIS®). This system combines discretionary control for individual distributed generators with a networked neighborhood hub control module that aggregates the small generators into a virtual single, large generator capable of selling power to the grid. The small distributed generators include biomass-based generators, fuel cells, combustion turbines, microturbines, wind turbines photovoltaic systems, and storage.

Rating: 4 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Survey_Results

Item_Type Article

Title Peoples taps market for mini power plants.

Author Daniels, Steve

Publication_Name Crain's Chicago Business, 1/20/2003, Vol. 26 Issue 3, p6, 1/2p

Reference http://www.powerlibrary.net/Remote/Remote.asp Regional Business News

Abstract Reports that Chicago, Illinois-based natural gas utility Peoples Energy Corp. has teamed up with the firm Hes Microgen, a Nevada-based maker of small generators, to offer small commercial power users on-site gener during peak demand. Business customers that Peoples Energy expects will generate demand for its mini po plants; Peoples' goals related to its growth.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title Primen Distributed Energy Research Perspectives

Author

Publication_Name PRIMEN

Reference http://my.primen.com/Applications/DE/Community/research/reports/perspective/index.asp

Abstract A list of Primen Distributed Energy Research Perspectives Reports

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title Project Opportunity Cost Survey and Estimating Tool for 1-10 MW Scale Distributed Generation

Author

Publication_Name EPRI

Reference http://www.epri.com/corporate/products_services/project_opps/DR/1007016.pdf

Abstract Installation of Distributed Generation assets in the 1-10 MW range at various points in the utility distribution system is becoming a more viable alternative to making T&D upgrades and/or importing additional central sta power during peak periods. These assets are commonly used for peaking purposes but are also used for extended periods.
Some planning tools exist to estimate equipment acquisition costs for these distributed generators and their associated switchgear. These costs are readily available from equipment vendors. Tools to estimate installa costs and indirect costs such as engineering, permitting, site development, and so forth—are not as readily available. These aggregate costs can, however, equal or exceed equipment acquisition costs.
The purpose of this project is to survey total project costs for actual distributed generation installations in th MW capacity range. These survey costs are then used to prepare a planning tool to estimate total life cycle for new projects.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☑

Title Project Opportunity PEM Fuel Cell — UPS for Battery Bank Replacement

Author

Publication_Name EPRI

Reference http://www.epri.com/corporate/products_services/project_opps/DR/1007017.pdf

Abstract Lead-acid batteries are commonly used to power critical loads during power outages. The batteries can pro bridge power while other, longer-term stand-by power sources are brought to the loads. In some cases, th the only emergency power source for the load.
The project is to evaluate, in the field, the capability of a Proton Exchange Membrane (PEM) fuel cell-based U system to replace the lead acid batteries used to power the DC lube oil pumps.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☑

Item_Type Article

Title	Project Opportunity The EPRI Screening Tool that compares Distributed Generation vs. T&D Expansion
Author	
Publication_Name	EPRI
Reference	http://www.epri.com/corporate/products_services/project_opps/DR/1007018.pdf
Abstract	Distribution planners are familiar with estimating costs of T&D infrastructure improvements to meet the grow loads served by substations. They are less familiar with estimating the costs of using distributed generation meet the growth of substation and/or long line loads and evaluating the relative merits of DG vs. T&D upgrad EPRJ has developed the Area Investment Strategy Model' that creates sophisticated technical and economic comparisons of the DG vs. T&D upgrade options. This tool, however, requires a skilled user, detailed informa on the distribution layout, and its use is comparatively time consuming.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☑

Title	PROJECTS OF THE YEAR.
Author	Smith, Douglas J.
Publication_Name	Power Engineering, Dec2002 Buyers' Guide 2003, Vol. 106 Issue 12, p4, 6p
Reference	http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite
Abstract	Features the top electric engineering projects in the U.S. for 2002. Distributed generation plants by NEO Corp 640 MW Harrison Station Unit 1 SCR Project by Allegheny Energy; 249 MW combined-cycle powerplant in Tacoma, Washington by Black & Veatch and Kiewit Industrial Co.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	RealEnergy Inc. Enterprise-Wide Distributed Generation Energy Management System
Author	
Publication_Name	NREL
Reference	http://www.nrel.gov/docs/fy03osti/33401.pdf
Abstract	Summarizes RealEnergys work, under contract to DOE• s Distribution and Interconnection R&D, to develop a system to To apply distributed generation (DG) across an enterprise or as a virtual utility for reliable and economic power generation, effective tools for management and control are required. The goal of this proje develop and perfect a system to monitor and control DG for optimal performance and operation.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	Rules to take aim at diesel emissions
Author	Eric Pianin
Publication_Name	THE WASHINGTON POST
Reference	http://stacks.msnbc.com/news/852834.asp
Abstract	Dec. 30 — The Bush administration is preparing new restrictions on life-threatening emissions from off-roa diesel-powered vehicles after decades of government neglect of this major pollution source. In a turnabout f previous battles over pollution policy, environmentalists have hailed the move, while some industry groups a vigorously challenging it.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Item_Type Article

Title Self-Powered: Is Distributed Generation in Our Energy Future?

Author

Publication_Name NPPC

Reference http://www.nwcouncil.org/library/cq/2002spring/selfpowered.htm

Abstract At the city of Portland's Columbia Boulevard Wastewater Treatment Plant, a fuel cell is turning methane gas f the sewage treatment process into non-polluting, renewable electricity. The fuel cell operates like a battery, never needs recharging. Methane gas that would normally be flared into the atmosphere is piped into the fue the cell extracts hydrogen from the gas, then combines it with oxygen. This creates a chemical reaction tha produces electricity, heat and water. Portland's fuel cell generates as much as 1.4 million kilowatt-hours per year—enough electricity to power 120 homes for an entire year.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title Service Opportunity Distributed Generation Strategy, Market, and Technology Assessment Services

Author

Publication_Name EPRI

Reference http://www.epri.com/attachments/245403_so1001115.pdf

Abstract TAKE CHARGE OF A NASCENT MARKET As more businesses demand premium power, and new power system infrastructure from plants to wfres becomes increasingly difficult to site, distributed generation (DG) poised for dramatic expansion.

Rating: 4 Available Electronically. ☑ Fee Required. ☑

Title Solar Gains.

Author Barbara Wolcott

Publication_Name Mechanical Engineering, Oct2001, Vol. 123 Issue 10, p66, 4p, 4c

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Reports the growing popularity of photovoltaic technology by means of distributed generation and source o for the unwired world. Willingness of customers to invest individual residential and business photovoltaic p systems; Impact of solar power on the developing world; Reduction of greenhouse gas emissions.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title The Distributed Generation Puzzle: Piecing It Together

Author Lihach, Nadine

Publication_Name Power Engineering, Apr2000, Vol. 104 Issue 4, p20, 4p, 2c

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Discusses the implication of distributed generation (DG) for the power industry in the United States. Applica of DG; Benefits from DG technologies; Problems associated with the use of DG.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Title The Energy Web

Author Steve Silberman

Publication_Name Wired Magazine

Reference http://www.wired.com/wired/archive/9.07/juice.html

Abstract The best minds in electricity R&D have a plan: Every node in the power network of the future will be awake responsive, adaptive, price-smart, ecosensitive, real-time, flexible, humming - and interconnected with every else.

Rating: 4 Available Electronically. ☑ Fee Required. ☐

Survey_Results

Item_Type Article

Title University of Wisconsin-Madison Micro-sources with Storage Bringing High Value to Customers

Author

Publication_Name NREL

Reference http://www.nrel.gov/docs/fy03osti/33418.pdf

Abstract Goals: The Wisconsin Power Electronics Research Center (WisPERC) of the University of Wisconsin-Madis is developing a hardware demonstration of the feasibility and value of distributed resources as a solution to sensitive load problem. Current efforts focus on research and development of micro-source distributed generation (MSDG) using commercial microturbine, fuel cell, or photovoltaic systems combined with energy storage to provide high quality, uninterrupted, efficient, environmentally friendly, and cost-competitive powe

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Upstate New York Travel Plazas Enable Truckers to Use Power without Idling

Author Bruce A. Scruton

Publication_Name Times Union, 04/07/2002

Reference http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source

Abstract Some manufacturers are retrofitting truck cabs with electrical hookups for use by drivers, and some newer models come with preinstalled connections so the engine can be shut down but power still flows.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Whose power is this anyway?

Author Gretchen Wenner

Publication_Name Business Journal Serving Fresno & the Central San Joaquin Valley, 1/1/2001 Issue 322715, p1, 2p, 1c

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Reports on the obstacles to the move towards distributed generation in California's electric power market. Dispute over the interconnection between small power plants and major utilities' network of transmission lin quality issues facing small power plans.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title 2002 Engine Order Survey - As Expected Engine Orders Stumble

Author Mark McNeely

Publication_Name Diesel & Gas Turbine Worldwide

Reference http://www.dieselpub.com/ww/2002_power_survey.pdf

Abstract Gas turbine engine orders, which have dominated previous surveys, are down 45% compared to 2001 — fr 1534 units to 841.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Article

Title A Fuel-Based Assessment of Off-Road Diesel Engine Emissions

Author Andrew J. Kean and Robert F. Sawyer and Robert A. Harley

Publication_Name The Journal of the Air & Waste Management Association

Reference http://www.awma.org/journal/ShowAbstract.asp?Year=&PaperID=274

Abstract The use of diesel engines in off-road applications is a sig-nificant source of nitrogen oxides (NO x) and particulate matter (PM 10). Such off-road applications include railroad locomotives, marine vessels, and equipment used for ag-riculture, construction, logging, and mining. Emissions from these sources are only beginning to be controlled. Due to the large number of these engines and their wide range of applications, to activity and emissions from these sources are uncertain. A method for estimating the emissions from off-roa diesel engines based on the quan-tity of diesel fuel consumed is presented. Emission fac-tors are normalize fuel consumption, and total activity is estimated by the total fuel consumed. Total exhaust emissions from of road diesel equip-ment (excluding locomotives and marine vessels) in the United States during 1996 have be estimated to be 1.2 x 10 9 kg NO x and 1.2 x 10 8 kg PM 10 . Emissions esti-mates published by the U.S. Environmental Protection Agency are 2.3 times higher for both NO x and exhaust PM 10 emissions than estimates based directly on fuel con-sumption. These emissions estimates disagree mainly due to difference activity estimates, rather than to differ-ences in the emission factors. All current emission inven-tories for o engines are uncertain because of the limited in-use emissions testing that has been performed on these eng Regional- and state-level breakdowns in diesel fuel consumption by off-road mobile sources are also prese Taken together with on-road measure-ments of diesel engine emissions, results of this study sug-gest that i 1996, off-road diesel equipment (including agriculture, construction, logging, and mining equipment, but not locomotives or marine vessels) was responsible for 10% of mobile source NO x emissions nationally, wher road diesel vehicles contributed 33%.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☑

Title A Fuel-Based Inventory for Heavy-Duty Diesel Truck Emissions

Author David B. Dreher and Robert A. Harley

Publication_Name The Journal of the Air & Waste Management Association

Reference http://www.awma.org/journal/ShowAbstract.asp?Year=&PaperID=218

Abstract A fuel-based method for estimating heavy-duty diesel truck emissions is described. In this method, emission factors are normalized to fuel consumption; vehicle activity is measured by the amount of diesel fuel consum For the San Francisco Bay Area during summer 1996, on-road heavy-duty diesel trucks were estimated at t upper bound to emit 110 ' 10 3 kg/day of nitrogen oxides (NO x) and 3.7 ' 10 3 kg/day of fine black carbon (I particles. These upper bound values were 2.3 and 4.5 times, respec-tively, the corresponding predictions c California's mo-tor vehicle emission inventory model, MVEI 7G. Signifi-cant decreases in diesel truck activity emissions, 70- 80% below typical weekday levels, were observed in the Bay Area on weekends. Reductio diesel NO x and BC particle emissions on weekends may contribute to higher ambient ozone concentrations higher organic carbon (OC) to BC ratios observed on weekends. Heavy-duty truck traffic peaks on weekda during the middle of the day and falls off before the afternoon rush hour. Therefore, the diurnal pattern of h duty truck travel may con-tribute to increases in ambient OC/BC ratios observed during late afternoon hours

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☑

Title Air Toxic Emissions UCICL Burner Programs

Author

Publication_Name UCI Combustion Laboratory

Reference http://www.ucicl.uci.edu/indexresearch.html

Abstract The UCICL air toxics program is attempting to determine the operating conditions that lead to HAP and OP emissions by source testing various natural gas-fired stationary systems, operating under industry standar well as low-NOx conditions.. The source test data will also serve to provide a better understanding of the mechanisms responsible for the formation of these pollutants.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Survey_Results

Item_Type Article

Title Alternatives to Diesel Truck Idling.

Author Tario, Joseph D.

Publication_Name Environmental Quality Management, Summer2002, Vol. 11 Issue 4, p95, 5p, 1bw

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Outlines some legislative initiatives affecting long-haul trucking in the U.S. Initiatives involving long-haul truck drivers; Description of several anti-idling technologies; Discussion on a demonstration project undertaken b York State to address the truck idling problem; Alternative technologies that would minimize unnecessary di idling.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title BP Cleaning up the Streets

Author Chris Cragg

Publication_Name Frontiers magazine Issue 4, Aug 2002

Reference http://www.bp.com/company_overview/technology/frontiers/fr04aug02/fr04systemcity.asp

Abstract BP introduces a new dynamic duo - a unique combination of emulsion diesel fuel and a revolutionary new lubricant that has an immediate effect on cutting vehicle exhaust emissions. What's more, a large London passenger bus company is very pleased with the results.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title Clearing the Air?

Author Birkland, Carol

Publication_Name Fleet Equipment, Oct2000, Vol. 26 Issue 10, p6, 1p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Discusses the issues involved in engine emission controls and diesel engine idling in the United States trucki industry. Reduction of idling; Effects of excessive idling and the possible benefits of idling alternatives; Fuel consumption and costs; Safety issues related to engine idling.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title COMED RELIES ON DISTRIBUTED GENERATION FOR RELIABILITY

Author Joseph Fiorito

Publication_Name The PMA Online Magazine

Reference http://www.retailenergy.com/archives/comed.htm

Abstract ComEd raises the bar in 2000 for Distributed Generation. This summer marks the third consecutive year that ComEd (A Unicom Company) will be utilizing diesel generators for peak shaving, distributed generation in the Chicago area.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Item_Type Article

Title	Davis, Calif., Researchers Design Fuel Cells for Use in Diesel Trucks
Author	Matthew Barrows
Publication_Name	The Sacramento Bee, 05/03/2001
Reference	http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source
Abstract	When the sun goes down, rows of diesel engines keep idling in order to power the microwaves, coffee ma heaters and air conditioners that provide truckers the comforts of home when they're on the road. Fuel cel which use a chemical reaction between hydrogen and oxygen to generate electricity, have been around sir 1960s. But in the last few years they've received renewed attention and are widely viewed as the energy for the next generation of American automobiles because they emit virtually no pollutants.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	Desulfurization of diesel fuel is being considered as a means of reducing emissions
Author	
Publication_Name	Rotec Design Ltd
Reference	http://www.rotecdesign.com/Sulfur%20FAQ%27s/sulfur.html
Abstract	Comments on the desulfurization of Diesel fuel Vs the implementation of FREEDOMAIR to achieve full useful reductions of NOx and PM emission levels.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	DG A SAFE BET FOR MANY CUSTOMERS.
Author	
Publication_Name	Power Engineering, Jun2002, Vol. 106 Issue 6, p58, 1p, 1c
Reference	http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite
Abstract	Deals with the use of distributed generation (DG) packages by Shelter Insurance Co. and Treasure Island R and Casino that saved them money. Installation of a Caterpillar generator sets by Shelter to provide standby electricity service; Use of an on-site generation by Treasure Island; Impact of the packages used by the companies on their expenditures.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	DG and ride-through technologies could solve grid reliability problems.
Author	Davis, Kathleen
Publication_Name	Electric Light & Power, Feb2002, Vol. 80 Issue 2, p25, 1/4p
Reference	http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite
Abstract	Focuses on the integration of distributed generation and ride-through technologies to solve power problems Significance of the Venture Development Corp. survey on the need of reliable power source; Importance of generating power source both efficient and environmentally friendly; Impact of cost on power source gener

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	DG Gaining Popularity as Risk Management Tool
Author	
Publication_Name	Power Engineering, Aug2001, Vol. 105 Issue 8, p62, 1/4p
Reference	http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite
Abstract	Focuses on the development of products and services that position distributed power (DP) as risk manager tool. List of companies that use DP as risk management tool; Issue pointed out by XENERGY regarding the u of DP as risk management tool.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Item_Type Article

Title	DG INTERCONNECTION STANDARD ADOPTED
Author	Steve Blankenship
Publication_Name	Power Engineering, Nov2002, Vol. 106 Issue 11, p146, 1p
Reference	http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite
Abstract	Reports on the approval of the standard for interconnecting distributed and dispersed electric generation fa by the Institute of Electrical and Electronics Engineers in the U.S. as of November 2002. Expected benefits fr the standard; Scope of the standard.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title	Diesel Engines Stay Away from Low Idle.
Author	
Publication_Name	PS: Preventive Maintenance Monthly, Dec2001 Issue 589, p18, 2p, 4 diagrams
Reference	http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier
Abstract	Focuses on the effect of low idle running on the engines of combat and tactical vehicles. Effects of not maintaining the normal operating temperature of the vehicle; Importance of high speed idling.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title	Diesel Reforming For Solid-Oxide Fuel Cell APUs
Author	Rodney L. Borup, Michael A. Inbody, José I. Tafoya and Jerry Parkinson
Publication_Name	Los Alamos National Laboratory Fuel Cell Program
Reference	http://www.eren.doe.gov/hydrogen/pdfs/nn0123ak.pdf
Abstract	Los Alamos has been conducting research under the sponsorship of the DOE/ SECA program – Solid State Energy Conversion Alliance. This work has been to develop technology suitable for the n-board reforming c diesel fuel for SOFC (Solid-Oxide Fuel Cells) for APU (Auxiliary Power units). This work leverages on going programs sponsored by DOE/OAAT fuel cell programs which support on-board reforming of gasoline for PE based fuel cell systems. In addition, diesel reforming work at LANL is examining on-board formation of redu for the reduction of NOx on lean-burn engines (diesel and lean gas). This work examines the reforming of d fuel to form reductants suitable to reduce NOx over lean NOx catalysts in oxygen rich environments, such a found in advanced diesel engines.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title	Distributed Energy Resources Program TECHNOLOGY OVERVIEW
Author	
Publication_Name	NREL
Reference	http://www.nrel.gov/docs/fy02osti/31251.pdf
Abstract	Distributed energy resources (DER) consist of energy generation and storage systems placed at or near the of use. This provides the consumer with greater reliability, adequate power quality, and the possibility to participate in competitive electric power markets. DER also has the potential to mitigate transmission congest control price fluctuations, strengthen security, and provide greater stability to the grid. DER can lead to lowe emissions and, particularly in combined heat and power (CHP) applications, to improved efficiency.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Item_Type Article

Title DISTRIBUTED GENERATION REDUCES DOWNTIME

Author Smith, Douglas J.

Publication_Name Power Engineering, Jan2002, Vol. 106 Issue 1, p58, 3p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Deals with the energy consumption strategy of Harbec Plastics at its plant in Rochester, New York. Implicati of power failures; Goals for addressing the problems posed by power failures; Information on the plant's p system.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title ELECTRICITY TRANSMISSION

Author GLENN ENGLISH

Publication_Name FDCH Congressional Testimony, 12/13/2001

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract NRECA believes that states should retain their traditional jurisdiction over retail sales and electric distribution systems. The Federal Energy Regulatory Commission (FERC) lacks the experience and resources to assum those responsibilities. FERC also lacks the capacity to address the important state and local interests inherer retail electric service. Accordingly, NRECA cannot support the provisions in Title I respecting distributed generation, net metering, and price responsive demand programs.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title Energy Foundation - Hewlett Foundation Energy Series

Author

Publication_Name Hewlett Foundation Energy Series

Reference http://www.ef.org/energyseries.cfm

Abstract In partnership with the Hewlett Foundation, the Energy Foundation has commissioned a series of research reports to address these issues. The reports will be released throughout 2002 and will be posted to this we

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title EPA gives the green light on diesel-sulfur rule.

Author

Publication_Name National Petroleum News, Apr2001, Vol. 93 Issue 4, p8, 1/3p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Reports the activities of the Environmental Protection Agency corresponding to the diesel-sulfur rule. Effecti of the rule; Percentage requirement for reduction of sulfur content in diesel; Effect of the smog-causing nitrc oxide emissions on children's health.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title FuelCell Energy's DFC300A Power Plant Receives Certification for Grid Interconnection in California

Author

Publication_Name Yahoo Finance

Reference http://biz.yahoo.com/bw/030219/192307_1.html

Abstract FuelCell Energy, Inc. (NasdaqNM: FCEL) announced today that it has received notice from the California Ene Commission (CEC) that its DFC300A Direct FuelCell® (DFC®) power plant is certified for grid interconnection under California's "Rule 21" standard.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Item_Type Article

Title GAS TECHNOLOGY INSTITUTE CAMPUS GENERATING ON-SITE POWER

Author

Publication_Name Power Engineering, Jan2003, Vol. 107 Issue 1, p50, 1/2p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Focuses on the Gas Technology Institute's Distributed Energy Technology Center (DETC) as a source of po for its campus. Importance of the center's ability to generate cooling, heating and power; Equipment provide DETC.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title GE SENDING 131 MEGAWATTS OF DISTRIBUTED POWER CAPACITY INTO ENERGY -HUNGRY WESTERN U.S.

Author

Publication_Name Energfy Cenral

Reference http://www.energycentral.com/

Abstract GE Distributed Power secured contracts during the first six months of this year to supply midrange power generation equipment for installations in California and the Pacific Northwest totaling 131 megawatts, or eno power for nearly 115,000 households.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title Long Beach, Calif., Port Commissioners Drop Opposition to Truck Idling Bil

Author Mark Edward Nero

Publication_Name Press-Telegram, 08/13/2002

Reference http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source

Abstract Aug. 13--LONG BEACH, Calif.--The Port of Long Beach Board of Harbor Commissioners on Monday reverse its opposition to a so-called truck idling bill.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title Microgrids unleash true power of dispersed energy

Author

Publication_Name Modern Power Systems, Aug2001, Vol. 21 Issue 8, p25, 3p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Focuses on the provision of an alternative way to supply electricity by the distributed energy technologies. Transformation of the power distribution structure into network of distributed resources; Advantages of mic Integration of the independent microgrids with transmission and distribution grids.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title ONSITE ENERGY SOUGHT FOR CITY

Author

Publication_Name ENR: Engineering News-Record, 4/22/2002, Vol. 248 Issue 9, p18, 1/3p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Focuses on the order of the Department of Energy to Durst Development on installing a distributed-energy powerplant in its data center in Manhattan. Usage of gas turbine generators; Implication of the World Trade Center destruction to the city's power supplies; Ability of New York to import power outside.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Item_Type Article

Title Optimizing On-Site Power

Author

Publication_Name Consulting-Specifying Engineer, May2000, Vol. 27 Issue 5, p28, 4p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Presents a roundtable discussion participated in by United States electrical engineers about interconnection issues, codes, technology and roadblocks caused by electric utilities. Challenges in specifying on-site powe switching systems; Building codes favorable to on-site power; Effect of industry deregulation on on-site po Distributed generation.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Predicting the market potential for distributed generation.

Author Cuomo, Robert J.

Publication_Name Electric Light & Power, Feb2002, Vol. 80 Issue 2, p24, 1/2p, 1 graph

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Discusses guidelines for predicting market potentials for distributed generation method. Significance of mark size on the penetration of the distributed generation to increase subsidies; Importance of knowing the cost technology being utilized; Role of the fuel cell technologies on distributed generation system.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Proving low NOx turbine technology in Santa Clara.

Author David Flin

Publication_Name Modern Power Systems, Apr99, Vol. 19 Issue 4, p27, 3p, 2 charts, 3 diagrams, 2c

Reference http://www.powerlibrary.net/Remote/Remote.asp Regional Business News

Abstract Discusses the Xonon combustion system which enables gas turbines to achieve established emission stan First application of the Xonon system at the Gianera Generating Station in Santa Clara, California; New Sour Review regulations posing constraining emission limitations; Distributed generation as an emerging market fo small gas turbines; Description of the Xonon system. INSET: Market access.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Refiners Urge New Look at Diesel Fuel Rule

Author Glenn Hess

Publication_Name Chemical Market Reporter, 01/08/2001, Vol. 259 Issue 2, p5, 1/5p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Deals with the plan of petroleum refiners to ask the administration of United States (U.S.) President-elect Ge W. Bush to review the rule issued by the U.S. Environmental Protection Agency that would eliminate sulfur i diesel fuel. Details on the rule; Effects of the rule on diesel supply and production.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Survey_Results

Item_Type Article

Title Review of Diesel Sulfur Rule Planned

Author

Publication_Name Chemical Market Reporter, 8/20/2001, Vol. 260 Issue 8, p32, 1/6p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Reports on the plan of the U.S. Environmental Protection Agency to convene a special advisory panel to rev Clinton-era rule that requires refiners to eliminate sulfur in diesel fuel. Argument of the National Petrochemica Refiners Association (NPRA) against the rule; Lawsuit filed by the NPRA against the agency; Opposition of environmental groups to the review.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title SIGMA to sue over diesel-sulfur rule

Author

Publication_Name National Petroleum News, Mar2001, Vol. 93 Issue 3, p10, 1/4p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Reports that the board of directors of SIGMA voted to sue the United States Environmental Protection Agen over the diesel-sulfur rule, which was finalized in January 2001. Required drop in the maximum sulfur conte diesel; Arguments of SIGMA against the rule.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title THE DIESEL DILEMMA

Author Sawyer, Christopher A.

Publication_Name Automotive Design & Production, Nov2001, Vol. 113 Issue 11, p37, 2/3p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Focuses on the diesel fuel industry in the U.S. as of November 2001. Standards imposed by the U.S. clean a registration; Provisions in the Federal 'Tier 2' standards; Factor that limited the appeal of diesel in the U.S.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title The new DISTRIBUTED GENERATION

Author Hall, James

Publication_Name Telephony, 10/1/2001, Vol. 240 Issue 14, pPTN10, 4p, 2 diagrams

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Deals with the importance of distributed generation and uninterruptible power supply technologies. Definitio distributed generation of electricity; Advantages of distributed generation technology; Need to change the e industry structure; Problems associated with the energy crisis in California

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title UPS Technology Takes Front Seat in Drive for Distributed Generation

Author

Publication_Name EnergyUserNews

Reference http://www.energyusernews.com/eun/cda/articleinformation/features/bnp__features__item/0,2584,63318,0

Abstract Industries across the board pay a high price for downtime-over a million dollars a day in lost revenue. Recer advancements in technology have led to more automated manufacturing processes which, in turn, have cre an increased dependence on electrical distribution systems.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Item_Type Article

Title	UTC Fuel Cell Fact Sheet
Author	
Publication_Name	UTC Fuel Cells
Reference	http://www.utcfuelcells.com/whoweare/pdf/factsheet.pdf
Abstract	UTC Fuel Cells (UTCFC), formerly International Fuel Cells, is the world leader in fuel cell production and development for commercial, transportation, and space applications. UTCFC is part of the UTC Power unit of United Technologies Corp. (NYSE: UTX)

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title	World's First Energy Station Featuring Hydrogen and Electricity Co-Production Opens in Las Vegas
Author	
Publication_Name	DOE
Reference	http://www.energy.gov/HQPress/releases02/novpr/pr02240_v.htm
Abstract	LAS VEGAS, NEV. -- The Department of Energy (DOE) today announced the opening of the world's first hydrogen energy station featuring the co-production of hydrogen fuel for vehicles and clean electric power fuel cells.

Rating: 3 Available Electronically. ☑ Fee Required. ☐

Title	A Cleanup for the Big Rigs.
Author	
Publication_Name	New York Times, 12/26/2000, Vol. 150 Issue 51614, pA30, 0p
Reference	http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier
Abstract	Focuses on the ruling of the United States Environmental Protection Agency (EPA) under the term of Carol Browner that requires refiners to reduce sulphur content in diesel fuel. Significance of reducing sulphur; Be of the ruling to the refiners and to the public; Industry costs assessment rejected by EPA in the production c sulphur-free fuel.

Rating: 2 Available Electronically. ☐ Fee Required. ☐

Title	ALL ABOUT DIESEL
Author	
Publication_Name	Fact Sheets
Reference	http://www.dieselforum.org/factsheet/dieselemissions.html
Abstract	Diesel technology has some inherent advantages in emissions performance, and a combination of technical improvements and regulatory requirements has led to a considerable improvement in diesel emissions levels the last two decades.

Rating: 2 Available Electronically. ☑ Fee Required. ☐

Title	Barton Prepares Short-Term Energy Solution For Calif.
Author	Mullins, Brody
Publication_Name	CongressDaily, 04/24/2001, p3, 1p
Reference	http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier
Abstract	Focuses on United States House Energy and Commerce Energy and Air Quality Subcommittee Chairman Joe Barton's California electricity bill. Provision on distributed generation; Sale of excess power back into the wholesale electricity market; Rationale for the short-term solutions proposed by Barton for the California po crisis.

Rating: 2 Available Electronically. ☑ Fee Required. ☐

Item_Type Article

Title Briefly Noted - Geogia's first residential fuel cell has been installed by Flint Energies

Author

Publication_Name Power Engineering, Aug2002, Vol. 106 Issue 8, p58, 3/5p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Presents news briefs related to the power generation industry in the U.S. as of August 2002. Installation of Georgia's residential fuel cell by Flint Energies company; Increase in the number of U.S. electric utilities offer distributed generation and combined heat and power services; Emissions certificates for all fuels received l Ford Power Products company in its two industrial engines.

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Coping with deregulation

Author Mankey, Eur Ing Gregory A

Publication_Name International Power Generation, Nov98, Vol. 21 Issue 7, p43, 1p, 1c

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Offers a look at distributed generation approach as an alternative to electricity deregulation in the North Ame market. Factors that will continue to drive electricity suppliers towards increasingly low emission levels; Key successful utilization of distributed generation; Key to economic development

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Court Upholds EPA Rule on Diesel Trucks

Author Eric Pianin

Publication_Name THE WASHINGTON POST

Reference http://www.washingtonpost.com/wp-dyn/articles/A48629-2002Sep6.html

Abstract A federal court here yesterday denied a request by two major diesel engine manufacturers to postpone a tc new antipollution standard for long-haul truck engines beyond the Oct. 1 deadline.

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Diesel and Gas Turbine Worldwide Confirms Large Decline in Reciprocating Engine and Gas Turbine Sales

Author

Publication_Name Diesel & Gas Turbine Worldwide

Reference http://www.dieselpub.com/ww/2002_power_survey.pdf

Abstract Diesel and Gas Turbine Worldwide Confirms Large Decline in Reciprocating Engine and Gas Turbine Sales

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Diesel Trucks, Buses Fueling Pollution Problem, Officials Say
Huge Amount of Exhaust Comes From Small Slice of Traffic

Author Katherine Shaver

Publication_Name THE WASHINGTON POST

Reference http://www.washingtonpost.com/wp-dyn/articles/A9134-2002Dec18.html

Abstract Heavy diesel vehicles are the major culprits behind the vehicle exhaust problem that threatens federal fundi new road and transit projects in the Washington area, regional planners told public officials yesterday.

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Survey_Results

Item_Type Article

Title EPA Cites Boston's Subway Line Cite for Idling Diesel Buses

Author Mac Daniel

Publication_Name The Boston Globe, 07/09/2002

Reference http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source

Abstract Jul. 9--Federal environmental officials yesterday cited the MBTA for breaking state law by allowing pollution diesel buses to idle excessively at several T facilities, a violation that could cost the agency hundreds of thousands of dollars in fines.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title EPA Links Lung Cancer, Diesel Exhaust

Author Eric Pianin

Publication_Name THE WASHINGTON POST

Reference http://www.washingtonpost.com/wp-dyn/articles/A34566-2002Sep3.html

Abstract The Environmental Protection Agency concluded yesterday that long-term exposure to exhaust from diesel engines likely causes lung cancer in humans and triggers a variety of other lung and respiratory illnesses.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title EPA Rule Hits Diesel Exhaust, Truck Engines.

Author Fialka, John J.

Publication_Name Wall Street Journal - Eastern Edition, 12/21/2000, Vol. 236 Issue 121, pA8, 0p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Deals with the regulation issued by the United States (U.S.) Environmental Protection Agency regarding dies fuel and diesel-powered trucks and buses. Effects of the regulation on the price of diesel fuel; Impact of the regulation on the oil industry in the U.S.; Environmental benefits of the rule.

Rating: 2 **Available Electronically** ☐ **Fee Required** ☐

Title FreedomAir – Technology for Reduction of Diesel Engine Soot and Nox Emissions

Author Robert Rutherford (B.Eng Mech) – Managing Director and Philip Teakle (MEngSc., MIEAust, RPEQ) – R&D Manager

Publication_Name Rotec Design Ltd

Reference http://www.rotecdesign.com/FreedomAir%20REPORT.html

Abstract FreedomAir is a novel external air supply system. It utilises a reciprocating piston pump assembly operating twice engine speed to deliver air to engine cylinders with a unique PULSE™1 scavenging effect. It has demonstrated a very high scavenging / trapping ability and very low pumping work required to achieve this.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title HEI Program Summary Research on Diesel Exhaust

Author

Publication_Name HEI Program Summary

Reference http://www.healtheffects.org/Pubs/DieselProgSumm-C.pdf

Abstract Diesel engines are an important part of the world's transportation and industrial infrastructure, especially in duty equipment such as trucks, buses, construction and farm equipment, locomotives, and ships. Two ben of diesel engines, compared to gasoline engines, are energy efficiency and durability. Diesel engines emit le CO2, a greenhouse gas, per unit of work done and are more fuel efficient than gasoline engines. As the nur of vehicles and miles traveled increases globally, energy and pollution issues will become increasingly impo

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Article

Title High Wire Act--The Future and Financing of Electric Transmission.

Author Roseman, Elliot; Nichols, Chris

Publication_Name Journal of Project Finance, Winter2001, Vol. 6 Issue 4, p7, 13p, 2 charts, 2 diagrams, 1 map

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Transmission constitutes just 10% of the assets of the integrated U.S. utilities, but compared to generation a distribution, has received a disproportionately small share of financial support, and until quite recently, management attention. A major challenge for the future will be to ensure that transmission investments are sufficient to support the anticipated growth in both wholesale and retail sales. In this article, the authors eva three potential future scenarios for transmission assets, with a transition between them possible over time. Broadly speaking, those scenarios are regulation-based transmission rates, market-based transmission rate and distributed generation-based transmission. Today, there is a strong current running in favor of for-profi activity in the transmission sector, but there may be continuing skepticism that commercial transmission offe genuine competitive neutrality. Regulatory attitudes will shape what the sector is allowed to become, and wi the regulatory battle may be one of the most significant aspects of achieving corporate change in transmiss [ABSTRACT FROM AUTHOR]

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title Latham, N.Y.-Based Fuel Cell Company Sees Uncertain Future

Author Kenneth Aaron

Publication_Name Times Union, 03/21/2001

Reference http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source

Abstract In the fuel cell world, that appears to be the word of the moment. If fuel cell technology develops, costs com down. If costs come down, customers will be willing to buy the low-emission, high-efficiency generators.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title Low-sulfur diesel fuel rule

Author

Publication_Name Warehousing Management, Jan/Feb2001, Vol. 8 Issue 1, p52, 1/4p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Discusses the United States Environmental Protection Agency's proposed low-sulfur diesel fuel regulation a January 2001. Provisions of the proposed rule; Implications for the warehousing sector.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title Neutralizing Diesel's Idle Threat

Author By John Gartner

Publication_Name Wired News

Reference http://www.wired.com/news/technology/0,1282,55646,00.html

Abstract While diesel-powered buses are great for taking little Christopher to school, the Environmental Protection Ag says their polluting engines are a growing threat to kids' health. A startup company is developing a cleaner alternative: the first fuel cell to run on ordinary diesel fuel.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Article

Title New Jersey hospital signs agreement allowing it to generate energy on site

Author

Publication_Name Hospital Materials Management, Feb2003, Vol. 28 Issue 2, p3, 1/8p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Focuses on the contract between East Orange General Hospital with AmericanDG in the U.S. Role of AmericanDG in supplying energy for the hospital through a distributed generation system; Installation of an c site co-generation facility.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title New York State Plan Would Regulate Use of Small Electricity Generators

Author Kenneth Aaron

Publication_Name Times Union, 05/07/2001

Reference http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source

Abstract May 7--Off the grid, but in the green. That's where state Department of Environmental Conservation Commissioner Erin Crotty wants to keep small electricity generators, for which she said the state will begin draw up emissions standards. The so-called distributed generation units often are used for backup power.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title Out-of-State Power Plant Developers Target Indiana: Governor O'Bannon Must Respond Now!

Author

Publication_Name Citizens Action Coalition of Indiana

Reference http://www.citact.org/pdevelope.html

Abstract Out-of-State Power Plant Developers are looking to Indiana for a quick buck at Hoosiers' expense. Hoosiers selected communities across the state are fighting for their land and water resources against what are knc "merchant power plants."

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title PEFC fuel cell starts field trial in Musashino.

Author

Publication_Name Modern Power Systems, Jan2001., Vol. 21 Issue 1, p9, 1/5p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Reports the field test of proton exchange membrane fuel cell unit from Ballard Generation Systems Inc. at NT Telecommunications Energy Laboratories in Japan. Collaboration with Ebara and Ebara Ballard; Relationship between fuel cell efficacy and nitrogen oxide emission level; Use for distributed power generation and autor applications.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title PENN ENGINEERS DEVELOP FUEL CELL THAT USES LIQUID DIESEL, THE FIRST SUCH DEVICE TO RUN ON A WIDELY AVAILABLE FUEL

Author Steve Bradt

Publication_Name PENN NEWS

Reference http://www.upenn.edu/pennnews/releases/2001/Q3/gorte0901.html

Abstract Chemical engineers at the University of Pennsylvania have developed a prototype fuel cell that's the first to a readily available liquid fuel source, in this case ordinary diesel fuel. The work nudges fuel cells closer to viability, offering the promise of compact, portable power sources that offer much more bang for the buck tl combustion engines or existing batteries.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Article

Title	Public Power's Generation and Environmental Profile
Author	Theresa Pugh
Publication_Name	American Public Power Association, January 2002
Reference	http://www.appanet.org/pdfreq.cfm?PATH_INFO=/LegislativeRegulatory/Environment/Publicpowerenvprofile02.pdf&VARACTION=GO
Abstract	Bulleted Items concerning th Public Power's Generation and Environmental Profile

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	Study Indicates Highway Diesel Fuel Supply Likely To Meet 2006 Demand
Author	
Publication_Name	Alliance of Automobile Manufacturers
Reference	http://www.autoalliance.org/pressreleases/pr022702.htm
Abstract	The nation's supply of highway diesel fuel, under a recently adopted regulation to cap sulfur content at 15 p per million (ppm), likely will meet passenger and commercial transportation needs in 2006, according to a stu released by the Alliance of Automobile Manufacturers and the Engine Manufacturers Association

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	Truck, Bus Operators to Study Idle Emissions Controls in Flagstaff, Ariz.
Author	
Publication_Name	Environmental News Network, 07/19/2001
Reference	http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source
Abstract	Jul. 19--Anyone who has ever traveled America's highways has pulled into a gas station or a rest stop whe diesel trucks and buses are standing, waiting for their drivers and passengers to climb aboard. The clouds smelly diesel fumes from these idling vehicles can be choking, and they create haze that obscures visibility i open areas.

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	Zinc Fuel Cell Provides Backup Power for Cell Site
Author	
Publication_Name	Transmission & Distribution World, Dec 1, 2002
Reference	http://tdworld.com/ar/power_zinc_fuel_cell/
Abstract	One of Metallic Power's (Carlsbad, California, U.S.) zinc fuel cells successfully provided backup power to a site during power interruptions, marking a milestone in its development of zinc fuel cell technology.

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Survey_Results

Item_Type Article

Title 2001 Critical Review - Diesel Engines: Environmental Impact and Control

Author Alan C. Lloyd and Thomas A. Cackette

Publication_Name The Journal of the Air & Waste Management Association

Reference http://www.awma.org/journal/ShowAbstract.asp?Year=&PaperID=517

Abstract The diesel engine is the most efficient prime mover commonly available today. Diesel engines move a large portion of the world's goods, power much of the world's equipment, and generate electricity more economic than any other device in their size range. But the diesel is one of the largest contributors to environmental pollution problems worldwide, and will remain so, with large increases expected in vehicle population and ve miles traveled (VMT) causing ever-increasing global emissions. Diesel emissions contribute to the developm of cancer; cardiovascular and respiratory health effects; pollution of air, water, and soil; soiling; reductions visibil-ity; and global climate change. Where instituted, control programs have been effective in reducing dies fleet emissions. Fuel changes, such as reduced sulfur and aromatics content, have resulted in immediate improvements across the entire diesel on- and off-road fleet, and promise more improvements with future c In the United States, for example, 49-state (non-California) off-road diesel fuel sulfur content is 10 times high than that of national on-road diesel fuel. Significantly reducing this sulfur content would reduce secondary particulate matter (PM) formation and allow the use of control technologies that have proven effective in the road arena. The use of essentially zero-sulfur fuels, such as natural gas, in heavy-duty applications is also expected to continue. Technology changes, such as engine modifications, exhaust gas recirculation, and ca aftertreatment, take longer to fully implement, due to slow fleet turnover. However, they eventually result in significant emission reductions and will be continued on an ever-widening basis in the United States and worldwide. New technologies, such as hybrids and fuel cells, show significant promise in reducing emissio from sources currently dominated by diesel use. Lastly, the turnover of trucks and especially off-road equip is slow; pollution control agencies need to address existing emissions with in-use programs, such as exhau trap retrofits and smoke inspections. Such a program is underway in California. These and other steps that be continued and improved will allow the use of the diesel engine, with its superior fuel consumption, to con to benefit society while greatly reducing its negative environmental and health impacts. The next ten years c and must become the "Decade of Clean Diesel."

Rating: 1 **Available Electronically.** ☑ **Fee Required.** ☑

Title ACEEE comments to TNRCC

Author Anna Monis Shipley, R. Neal Elliott, PhD, PE

Publication_Name AC3E

Reference http://www.aceee.org/chp/tnrcccomment.pdf

Abstract The American Council for an Energy Efficient Economy (ACEEE) encourages the adoption of energyefficient technologies and practices in all sectors of the U.S. economy. We offer a unique perspective that blends engineering, business, and environmental expertise. ACEEE holds the position that distributed generation ca beneficial to both the electricity customer and electricity supplier, while reducing overall air emissions.

Rating: 1 **Available Electronically.** ☑ **Fee Required.** ☐

Title Airlines Must Comply With Federal Fuel Standards, Stormwater and Spill Prevention Requirements, and Repo Emergency Releases

Author

Publication_Name Enforcement Alert

Reference http://www.epa.gov/compliance/resources/newsletters/civil/enfalert/airlines.pdf

Abstract Airlines Must Comply With Federal Fuel Standards, Stormwater and Spill Prevention Requirements, and Repo Emergency Releases

Rating: 1 **Available Electronically.** ☑ **Fee Required.** ☐

Item_Type Article

Title API Statement on EPA Highway Diesel Panel Report

Author

Publication_Name American Petroleum Institue

Reference http://api-ec.api.org/media/index.cfm?objectid=6C27E5F3-F260-462B-8315C0B550AC8835&method=display_body&er=1&bitmask=001007000000000000

Abstract WASHINGTON, October 30 – The American Petroleum Institute welcomes today's release of the final report the U.S. Environmental Protection Agency's Clean Diesel Independent Review Panel on technology issues related to the 2006 highway diesel fuel regulations.

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Title Cleaner fuel to ride into market via RTA deal

Author Bennett, David

Publication_Name Crain's Cleveland Business, 4/15/2002, Vol. 23 Issue 15, p3, 2p

Reference http://www.powerlibrary.net/Remote/Remote.asp EBSCO HOST search

Abstract Reports the collaborative project between the Regional Transit Authority with the U.S. Environmental Protect Agency in Cleveland, Ohio. Availability of low-sulfur diesel fuel for commercial use; Observation of air emiss Emission requirements of the federal government.

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Title Decade of the Clean Diesel Coming, State Air Regulator Tells Orlando Meeting

Author Drew Douglas

Publication_Name The AWMA Official Show Daily

Reference http://www.bna.com/awma2001/story15.html

Abstract ORLANDO, Fla.--The coming 10 years can become the "decade of the clean diesel" if regulators and industi continue to push new technologies to cut exhaust emissions, a senior California regulator predicted here Ju

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Title EPA Mandates Sulfur Cuts in Diesel

Author

Publication_Name Chemical Week, 1/3/2001, Vol. 163 Issue 1, p7, 1/6p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Deals with the mandate issued by the United States Environmental Protection Agency concerning sulfur con in diesel fuel. Opposition to the mandate; Percentage reduction in sulfur content.

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Title EPA Warns Texas Bill May Jeopardize Approval of Houston Smog Plan

Author Bill Dawson

Publication_Name Houston Chronicle, Apr 12, 2001

Reference http://www.powerlibrary.net/Remote/Remote.asp EBSCO HOST search

Abstract Apr. 12--The Environmental Protection Agency has warned state lawmakers that a bill backed by the oil ind could jeopardize federal approval of Houston's new smog plan.

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Article

Title Factsheet: Dirty Diesel

Author

Publication_Name Sierra Club

Reference http://www.sierraclub.org/cleanair/factsheets/diesel.asp

Abstract The black choking smoke we see coming from big trucks and buses looks menacing, and it is. Today, one of biggest problems we face in trying to clean up our nation's air is emissions from diesel engines. Most diesel pollution comes from diesel-powered vehicles, in particular large trucks and buses. Diesel trucks and buses by far the most widespread method of transporting all sorts of products across the country.

Rating: 1 Available Electronically. ☑ Fee Required. ☐

Title FUEL SUPPLIER SEES A CLEANER FUTURE

Author Alex Philippidis

Publication_Name Westchester County Business Journal, 10/23/2000, Vol. 39 Issue 43, p2, 1p

Reference http://www.powerlibrary.net/Remote/Remote.asp EBSCO HOST search

Abstract Reports on RAD Energy Corp.'s sale of ultra low-sulfur diesel in Westchester County, New York. Benefits th the company will get from a federal mandate requiring cleaner diesel fuel for businesses; Cost of ultra low-s diesel. INSET: Other fuel options.

Rating: 1 Available Electronically. ☑ Fee Required. ☐

Title Future of diesel rule in question

Author

Publication_Name Logistics Management & Distribution Report, Feb2001, Vol. 40 Issue 2, p33, 1/5p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Focuses on status of a proposal to reduce the sulfur content of highway diesel fuel in the United States. Pro of the administration of President Bill Clinton; Stricter emission standards for heavy-duty trucks; Environmentalists and health groups' support for the measure.

Rating: 1 Available Electronically. ☐ Fee Required. ☐

Title Industry Trying to Kill New Diesel Protections

Author

Publication_Name

Reference http://www.sierraclub.org/cleanair/news/dieselsuit.asp

Abstract The National Petrochemical and Refiners Association has filed suit to kill EPA's new diesel clean air standard Sierra Club, along with other public health and environmental organizations have decided to intervene in that to protect the standards.

Rating: 1 Available Electronically. ☑ Fee Required. ☐

Title Kim Hotstart hops on new train. (cover story)

Author Reed, Paul

Publication_Name Journal of Business (Spokane), 10/24/2002, Vol. 17 Issue 22, pA1, 2p, 1c

Reference http://www.powerlibrary.net/Remote/Remote.asp Regional Business News

Abstract Reports on Spokane, Washington-based Kim Hotstart Manufacturing Co.'s development of a railroad product called the Diesel Driven Heating System (DDHS). U.S. Environmental Protection Agency's (EPA) selection of system for a demonstration project aimed at reducing noise and air pollution from idling railroad locomotives; Marketing agreement made with ZTR Control Systems Inc. to sell the system

Rating: 1 Available Electronically. ☐ Fee Required. ☐

Survey_Results

Item_Type Article

Title Learning Refining

Author

Publication_Name PetroStrategies, Inc.

Reference http://www.petrostrategies.org/LearningRefining.html

Abstract Crude oil is processed or refined to produce useable products such as gasoline. The process is very comp and involves both chemical reactions and physical separations. Crude oil is composed of thousands of diffe molecules. It would be nearly impossible to isolate every molecule and make finished products from each molecule. Chemists and engineers deal with this problem by isolating mixtures of molecules according to the mixture's boiling point range. For example, gasoline molecules might boil in the range from 90 to 400 oF. Hom heating oil could be from molecular mixes that boil from 500 to 650 oF. For convenience, the mixtures or frac are given a name. The following chart illustrates the boiling range and name of the petroleum fraction.

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Title Let's Clear the Air

Author Joe Fohn

Publication_Name Technology Today

Reference http://www.swri.org/3pubs/ttoday/summr96/clear.htm

Abstract Karl J. Springer, former vice president of the Automotive Products and Emissions Research Division, shares insights on the evolution of emissions research at the Institute and the future of automotive research in gene Summer 1996

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Title Letters on the implementation of the diesel sulfur rule

Author

Publication_Name National Petroleum News, Apr2001, Vol. 93 Issue 4, p6, 2p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Presents letters on the implementation of the diesel sulfur rule in the United States. Impact of the rule on the availability of an adequate supply of diesel fuel; List of organizations paying attention on the implementation; Suggestion on the revision of the Environmental Protection Agency rule.

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Title Long Beach, Calif., Council Endorses Limits on Idling Trucks at Port

Author Jason Gewirtz

Publication_Name Press-Telegram, 08/07/2002

Reference http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source

Abstract Aug. 7--LONG BEACH, Calif.--The City Council on Tuesday endorsed an Assembly bill that would cut pollutic from diesel trucks at the port, siding with doctors, environmentalists and residents who said the bill would m the city's air cleaner.

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Article

Title Long Beach, Calif.-Area Harbor Officials Oppose Anti-Pollution Bill Source

Author Mark Edward Nero

Publication_Name Press-Telegram, 08/06/2002

Reference http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source

Abstract Aug. 6--LONG BEACH, Calif.--The Board of Harbor Commissioners on Monday took a formal stand against a state bill to stem pollution by limiting idling trucks a bill the City Council will be called on tonight to endorse.

Rating: 1 **Available Electronically.** ☑ **Fee Required.** ☐

Title MSHA Pursues Rulemaking on Diesel Particulate Matter Exposure

Author

Publication_Name Professional Safety, Nov2002, Vol. 47 Issue 11, p12, 1/5p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Reports on the U.S. Mine Safety and Health Administration's publication of an advance notice of proposed rulemaking to amend its standard on Diesel Particulate Matter Exposure of Underground Metal and Nonmetal Miners. Response to the legal challenges of the standard.

Rating: 1 **Available Electronically.** ☑ **Fee Required.** ☐

Title NATURAL GAS VEHICLES: Diesel Engine Faces Cleanup.

Author

Publication_Name GRID Gas Research Institute Digest

Reference http://www.gastechnology.org/webroot/app/xn/xd.aspx?xd=10AbstractPage\5278.xml

Abstract For a field test at the Denver Regional Transportation District (RTD), a bus with a Detroit Diesel Corp. 6V-92 engine was retrofitted with a dual fuel conversion system that permits the use of compressed natural gas (C with the oil. Engine performance…

Rating: 1 **Available Electronically.** ☑ **Fee Required.** ☐

Title NPRA Asks for Revision of EPA Diesel Sulfur Rule

Author

Publication_Name Chemical Market Reporter, 10/08/2001, Vol. 260 Issue 13, p9, 1/6p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Reports that the National Petrochemical and Refiners Association asked the United States Court of Appeals the D.C. Circuit to send the United States Environmental Protection Agency (EPA) diesel sulfur rule back to th agency for revision. What the groups argue about short supply of diesel fuel; Percent of reduction in highw diesel fuel sulfur levels by mid-2006 under the EPA rule

Rating: 1 **Available Electronically.** ☑ **Fee Required.** ☐

Title Refiners Balk at Texas Diesel Rule; Clean Air Plan under Threat

Author Neil Strassman

Publication_Name Fort Worth Star-Telegram, Mar 29, 2001

Reference http://www.powerlibrary.net/Remote/Remote.asp EBSCO HOST search

Abstract Mar. 29--AUSTIN, Texas--In the first serious legislative challenge to the state's clean air plans, oil industry officials are threatening to derail the effort by refusing to make a cleaner burning diesel fuel for Texas.

Rating: 1 **Available Electronically.** ☑ **Fee Required.** ☐

Item_Type Article

Title REFINERS KEEP FIGHTING SULFUR RULE

Author Franz, Neil

Publication_Name Chemical Week, 3/14/2001, Vol. 163 Issue 11, p34, 1/2p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Reports on the opposition of the United States petroleum refining industry to a rule regarding the lowering of sulfur content of diesel fuels. Mandates of the rule; Effect of the rule on diesel supplies and prices; Environmental benefits from the rule.

Rating: 1 Available Electronically. ☑ Fee Required. ☐

Title Small Grids Could Solve Big Problems.

Author

Publication_Name Consulting-Specifying Engineer, Summer2002 Supplement, Vol. 31 Issue 6, p6, 1/3p

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Reports on a way of organizing distributed generated resources to help avoid some disruptions that device as microturbines and fuel cells can cause to the larger grid in the United States. Strategy to provide extra co and power security for facility owners and managers; Report released in April 2002 by the Consortium for E Reliability Technology Solutions.

Rating: 1 Available Electronically. ☑ Fee Required. ☐

Title St. Paul, Minn., High School Students Want Idling School Buses Turned Off

Author John Welbes

Publication_Name Saint Paul Pioneer Press, Nov 12, 2002

Reference http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source

Abstract Nov. 12--St. Paul high school students, spurred by data on the hazards of diesel exhaust, a Sierra Club proj and a new Minnesota state law, are pressing the district to have idling buses turned off outside schools.

Rating: 1 Available Electronically. ☑ Fee Required. ☐

Title The Diesel Sulfur Rule--Further Balkanizing America's Fuel System

Author

Publication_Name National Petroleum News, May2001, Vol. 93 Issue 5, p12, 3/5p

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract Asserts that the rule published by the United States Environmental Protection Agency requiring almost a hun percent reduction in the sulfur content of on-road diesel fuel will only exacerbate the problems of the fuel sy Requirements of the rule; Disadvantages of the application of the rule for petroleum makers; Effective date c rule.

Rating: 1 Available Electronically. ☑ Fee Required. ☐

Title Two Railroad Companies Offer to Curb Emissions if Texas Drops Proposed Rules

Author Bill Dawson

Publication_Name Houston Chronicle

Reference http://www.powerlibrary.net/Remote/Remote.asp Newspaper Source

Abstract Dec. 5--Two railroad companies have agreed to reduce air pollution voluntarily if state officials drop propose rules to require them to cut their smog-forming emissions.

Rating: 1 Available Electronically. ☑ Fee Required. ☐

Survey_Results

Item_Type Article

Title US EPA proposes Mobile Sources Air Toxics rule

Author

Publication_Name DieselNet: Engine and Emission Technologies Online

Reference http://www.dieselnet.com/news/0007epa.html

Abstract The US Environmental Protection Agency (EPA) has issued a Proposed Rule to Control Emissions of Hazard Air Pollutants from Mobile Sources. The proposal identifies 21 substances that should be considered Mobile Source Air Toxics (MSATs). The list of MSATs includes diesel exhaust, as a whole, along with other compc that result from fuel. Source: US EPA July 20, 2000
combustion in motor vehicle engines, as well as certain metal compounds.

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Title WHITMAN SAYS EPA WILL IMPLEMENT DIESEL RULES

Author

Publication_Name CongressDaily AM

Reference http://www.powerlibrary.net/Remote/Remote.asp MasterFILE Premier

Abstract WHITMAN SAYS EPA WILL IMPLEMENT DIESEL RULES

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Book

Title Distributed Generation Sourcebook: 2002 Edition

Author

Publication_Name Distributed-Generation.com

Reference http://www.distributed-generation.com/Library/2002_DG_Sourcebook_Brochure.pdf

Abstract The rapidly developing Distributed Generation (DG) market is complex, with many players and stakeholders. Resource Dynamics Corporation has developed the Distributed Generation Sourcebook: 2002 Edition to serv both a learning tool and a handbook for those hoping to understand and benefit from DG. A comprehensive outline of the 106 page Sourcebook. Order Form Captured Only

Rating: 5 ***Available Electronically*** ☐ ***Fee Required*** ☑

Title INSTALLED BASE OF U.S. DISTRIBUTED GENERATION: 2003 EDITION

Author

Publication_Name Distributed-Generation.com

Reference http://www.distributed-generation.com/Library/2003_Installed_Base_Order_Form.pdf

Abstract The DG Monitor announces its baseline study, The Installed Base of U.S. Distributed Generation: 2003 Editio is now available for order. Until now, government and industry decision makers have lacked concrete data much Distributed Generation (DG) actually exists. This report, which estimates the installed DG base in the U as of January 1, 2001, provides this key, and previously unavailable baseline information to help decision m at all levels make informed DG policy, regulatory and market decisions.

Rating: 5 ***Available Electronically*** ☐ ***Fee Required*** ☑

Title DIRECTORY OF INTERCONNECTION TECHNOLOGIES AND EQUIPMENT 2003

Author

Publication_Name Distributed-Generation.com

Reference http://www.distributed-generation.com/Library/2003_Interconnection_Directory_Order_Form.pdf

Abstract Faced with fewer barriers to interconnection, engineers, planners, and plant managers may soon view DG opportunities to be attractive that were previously considered unfeasible. By listing the equipment and the technologies necessary to interconnect all kinds of DG applications, the DG Monitor's Directory Of Interconnection Technologies And Equipment helps these decision-makers quickly develop a short list of potential interconnection solutions. It also provides contact information for manufacturers and distributors w can help the decision-maker determine the best interconnection solution for a particular application. Consequently, this Directory can be a valuable tool, especially for professionals who are just becoming fami with interconnection solutions. The directory is available for $165, or for $140 for orders of 2 or more.

Rating: 4 ***Available Electronically*** ☐ ***Fee Required*** ☑

Title Electric Power Systems Quality

Author Roger C. Dugan Surya Santoso Mark F. McGranaghan H. Wayne Beaty

Publication_Name Electrotek Concepts

Reference http://www.electrotek.com/pqbook/index.htm

Abstract Electric Power Systems Quality, 2e is the clearest, most complete reference for understanding the causes power quality problems and learning how to prevent them. Nearly twice the size of the first edition, the secc edition has been expanded and updated to reflect the increasing sensitivity of microelectronic devices and t ever-growing stress placed upon the power grid.

Rating: 4 ***Available Electronically*** ☐ ***Fee Required*** ☑

Item_Type Book

Title Estimating the Public Health Benefits of Proposed Air Pollution Regulations (2002)

Author

Publication_Name

Reference http://books.nap.edu/books/0309086094/html/index.html

Abstract The U.S. Environmental Protection Agency (EPA) has estimated that thousands of premature deaths and numerous cases of illness, such as chronic bronchitis and asthma attacks, could be prevented by reducing exposure to air pollution. These estimates come from regulatory health benefits analyses, which attempt to quantify changes in the expected cases of mortality and illness that are likely to result from proposed air poll regulations. The estimates are often controversial, and the methods used to prepare them have been questi In 2000, Congress recognized concerns about the methods used by EPA and emphasized the need for "the scientifically defensible methodology in estimating health henefits." It directed EPA to ask the National Acade of Sciences "to conduct a study of this issue and recommend to the agency a common methodologyto be followed in all future analyses." Summary Only Captured - Complete Text readable on line for free.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Modeling Mobile-Source Emissions (2000)

Author

Publication_Name

Reference http://www.nap.edu/books/0309070880/html/

Abstract THE MOBILE SOURCE EMISSIONS FACTOR (MOBILE) model is a computer model developed by the U.S. Environmental Protection Agency (EPA) for estimating emissions from on-road motor vehicles. MOBILE is us in air-quality planning and regulation for estimating emissions of carbon monoxide (GO), volatile organic compounds ~VOCs), and nitrogen oxides (NO~~ and for predicting the effects of emissions-reduction programs.1 Because of its important role in air-quality management, the accuracy of MOBILE is critical. Poss consequences of inaccurately characterizing motor-vehicle emissions include the implementation of insuffic controls that endanger the environment and public health or the implementation of ineffective policies that im excessive control costs. Billions of dollars per year in transportation funding are linked to air-quality attainme plans, which rely on estimates of mobile-source emissions. Transportation infrastructure decisions are also affected by emissions estimates from MOBILE. Summary Only Captured - Complete Text readable on line for free.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title Review of the Research Program of the Partnership for a New Generation of Vehicles: Seventh Report (20

Author

Publication_Name

Reference http://www.nap.edu/books/030907603X/html/

Abstract This is the seventh report by the National Research Council Standing Committee to Review the Research Program of the Partnership for a New Generation of Vehicles (PNGV). The PNGV program is a cooperative research and development (R&D) program between the federal government and the United States Council f Automotive Research (USCAR). The purpose of this program is to conceive, develop, and implement new technologies capable of significantly reducing the petroleum consumption and carbon dioxide emissions of t U.S. automobile fleet. The founders recognized that, to have substantial impact, this new generation of vehi must be sold in high volume. This, in turn, requires that the vehicles meet or exceed all emission and safety requirements and offer all of the characteristics that result in strong customer appeal.
This report contains the committeens assessment of the overall balance and adequacy of the PNGV resear program to meet its technical goals and the program s efforts to develop commercially feasible low-emissior propulsion systems. The committee also comments on significant changes that have occurred since the inception of the PNGV program and how these changes might influence this program. Summary Only Captur Complete Text readable on line for free.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Database

Title BNA Environment & Safety Library
Author
Publication_Name BNA, Inc.
Reference http://www.bna.com/products/ens/eslw.htm
Abstract This powerful, easy-to-use, continuously updated research collection of federal and state laws, regs, docu and compliance tools is the only source you need for environment and safety information.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☑

Title Heavy-Duty Diesel Emissions Database
Author
Publication_Name EPA
Reference http://www.epa.gov/otaq/models/analysis/hdd-db7.xls
Abstract The data in this Excel Spreadsheet file was used in the development of a model correlating diesel fuel prope with emissions of regulated pollutants. The model was developed by the Environmental Protection Agency u resources at Southwest Research Institute. This version of the database includes all repeat data, and all te cycle data that was rejected in this analyses.
Additional information about the project can be found at: http://www.epa.gov/otaq/models/analysis.htm.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title PLATO (Plants, Loads, stranded Assets, Transmission, and Operations) Database
Author
Publication_Name Energy OnLine
Reference http://www.energyonline.com/products/plato.asp
Abstract PLATO contains data for all utilities and IPPs in the entire United States. Data can be retrieved at any level of grouping such as organization, region, area, state, or council as categorized by the North American Electric Reliability Council (NERC).

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☑

Title Renewable Electric Plant Information System (REPis)
Author
Publication_Name EERE
Reference http://www.eere.energy.gov/repis/
Abstract REPiS is a database which provides information on renewable energy plants and installed capacity for ener planners, policy makers, and others interested in renewable energy. This database contains information on renewable energy generation capacity connected to the utility grid.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title Air Facility Subsystem (AFS)
Author
Publication_Name
Reference http://www.epa.gov/compliance/planning/data/air/aboutafs.html
Abstract The Air Facility Subsystem (AFS) contains compliance data and permit data for stationary sources of air poll regulated by the U.S. EPA, and state and local air pollution agencies. This information is used by the environmental regulatory community to track the compliance status of point sources with various programs regulated under the Clean Air Act. Data Dictionary Only captured.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Survey_Results

Item_Type Database

Title Distributed Generation Analysis Tool Introduced

Author

Publication_Name EERE - DER

Reference http://www.naseo.org/energy_sectors/power/distributed/default.htm

Abstract The Distributed Generation Analysis Tool Version 1.0 is now available. With this software, users are able to conduct a 20-year lifecycle cost analysis and assess the environmental impacts of distributed generation technologies. The software is easy to use, requiring some knowledge of utility rates and the characteristics specific DG units. Users input required data and the tool analyzes and generates emissions and operating summaries and financial analyses. Included in the software are five specific scenarios intended to provide a reference and breadth of evaluation alternatives for users and to provide a starting point for testing and ass the functionality of the software. This useful tool was developed by the Science Applications International Corporation with assistance from NASEO and support from the U.S. Department of Energy. See below for download options. For more information, contact Kate Burke at NASEO, kb@naseo.org.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title EGRID The Emissions & Generation Resource Integrated Database

Author

Publication_Name EPA

Reference http://www.epa.gov/airmarkets/egrid/index.html

Abstract A comprehensive source of data on the environmental characteristics of all electric power generated in the States. An integration of 24 different federal data sources, E-GRID2000 provides information on air pollutant emissions and resource mix for individual power plants, generating companies, states, and regions of the p grid. The data are expressed in terms that allow direct comparison of the environmental attributes of electric generation at any level.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title EIA Electricity Database Files

Author

Publication_Name EIA

Reference http://www.eia.doe.gov/cneaf/electricity/page/data.html

Abstract
Electric Generator Databases
Electric Utilities Database (Form EIA-861)
Electric Utility Demand-Side Management (EIA-861:Schedule V portion of the database only) Includes information on demand-side management efforts in the industry. Major Electric Utilities, Licensees, and Othe Database (FERC Form 1)
Public Electric Utility Database (Form EIA-412)
Monthly Cost and Quality of Fuels for Electric Plants Database (Form EIA-423)
Monthly Cost and Quality of Fuels for Electric Plants Database (FERC Form No. 423)
EIA - 767 Data Files
Current and Historical Monthly Retail Sales, Revenues, and Average Revenue per Kilowatthour by State and Sector (Format: Excel Spreadsheet)
Power Plant DatabasesIncludes data on generation, fuel consumption, and stocks. Utilities (Form EIA-906) a Nonutilities (Form EIA-906)
Wholesale Electric (Bulk Power) Trade Database
Clean Air Act Database Browser

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Database

Title Form EIA-860A Database Annual Electric Generator Report--Utility

Author

Publication_Name EIA

Reference http://www.eia.doe.gov/cneaf/electricity/page/eia860a.html

Abstract This is an electric utility generator level data file that includes such information as in-service date, energy sc nameplate capacity, summer and winter capability, etc. Data source is survey EIA-860A: "Annual Electric Generator Report--Utility." The data are compressed into a self-extracting (.exe) zip file that expands into 4 D files: 1 plant (PLANTYyy.DBF*), 1 utility (UTILYyy.DBF*), and 2 generator files (TYPE3Yyy.DBF* and TYPE4Yyy.DBF*) and an ASCII layout file (LAYOUT.TXT). Includes in-service date, energy source, nameplat capacity, and summer/winter capability for utility generators.

Rating: 4 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title Form EIA-860B Database Annual Electric Generator--Nonutility

Author

Publication_Name EIA

Reference http://www.eia.doe.gov/cneaf/electricity/page/eia860b.html

Abstract This is the nonutility generating facility data file that includes such information as company, facility, unit ID, fa nameplate capacity, generator nameplate capacity, unit type, prime mover, energy source, qualifying facility status, NAICS codes, consumption, heat content, facility generation, generator generation, purchases, sales utility, facility use, environmental information, generator status, operational status, on-line date. Data source survey EIA-860B: "Annual Electric Generator Report - Nonutility." The data are compressed into a self-extra (.exe)zip file that expands into 7 DBF files and an ASCII layout file (Layout.txt). Includes company, facility, ur nameplate capacity, unit type, prime mover, energy source, qualifying facility status, NAICS codes, consump heat content, generation, purchases and sales, generator status, and on-line date for nonutility generators.

Rating: 4 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title MAISY Demand Response Databases

Author

Publication_Name MAISY

Reference http://www.maisy.com/drdb.htm

Abstract MAISY Demand Response Databases include end-use-detailed and program-detailed demand response (DR potentials and estimated program impacts for a statistically representative sample of individual residential, commercial and industrial customers for every state and utility service area in the US. Customer detail in the databases permits users to determine DR potentials and estimated program impacts for total customer class (residential, commercial and industrial), user-defined customer segments and individual customers. Custome detailed analysis provides a more accurate DR analysis results than those based on "average" customer information.

Rating: 4 ***Available Electronically.*** ☑ ***Fee Required.*** ☑

Title Petroleum-Based Fuels Property Database

Author

Publication_Name

Reference http://www.ott.doe.gov/fuelprops/

Abstract The database includes data on various physical, chemical, operational, and environmental, safety, and healt properties. These data result from tests conducted according to standard test methods (nearly all are Ameri Society for Testing and Materials, or ASTM, methods). We've included the source and test methods for each data set. Glossary Only Captured

Rating: 4 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Survey_Results

Item_Type Database

Title Platts UDI Catalog of Utility Data

Author

Publication_Name Platts UDI (formerly Utility Data Institute)

Reference http://www.platts.com/udidata/catalog.html

Abstract Platts UDI is a directory and data base publishing unit of Platts, the energy information group of The McGraw Companies. Including 2000 PRODUCTION COSTS: OPERATING STEAM-ELECTRIC PLANTS, 2000 PRODUCTION COSTS: GAS TURBINE AND COMBINED-CYCLE PLANTS, WORLD ELECTRIC POWER PLANTS DATA BASE

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☑

Title BC Research Inc. Alternative Transportation Fuels Database

Author

Publication_Name

Reference http://catf.bcresearch.com/catf/catf.nsf

Abstract BC Research Inc. staff have maintained this database of technical papers since 1984 to support the technic and business community in the rapidly moving area of alternative transportation fuels. This database is linke from hundreds of other web sites worldwide, as well as a number of prominent corporate Intranets, and ha active user base of tens of thousands of people per year and growing. Due to copyright reasons, BC Rese cannot provide copies of any articles catalogued in this database. However, using the source information provided in the listed abstracts, you may be able to obtain a copy of a publication through your local library c commercial document retrieval service.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title BUGS 1 - Database of Public Back-Up Generators (BUGS) in California

Author

Publication_Name CEC DER

Reference http://www.energy.ca.gov/database/2001_PUBLIC_BUGS_INVENTORY.XLS

Abstract This database was assembled largely from information received from all the air districts in California except Bay Area AQMD, with supplemental information supplied by the California Department of Corrections, The C of Energy Assessments of the California Department of General Services, PG&E, Silicon Valley Power, and major telecommunications company operating in the state. The user of this inventory needs to be aware of several features and assumptions made in assembling elements of the database, as well as several known limitations.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title BUGS 2 - Database of Portable Back-Up Generators (BUGS) in California

Author

Publication_Name CEC DER

Reference http://www.energy.ca.gov/database/2001PORTABLE_BUGS_INVENTORY.XLS

Abstract This database was extracted from the California Air Resources Board (ARB) database of portable diesel er permitted for operation in California. Only engines used to power generators with generating capacity grea than 300 kW are included. This list is as of May 2001.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Survey_Results

Item_Type Database

Title MAISY Utility Customer Databases

Author

Publication_Name MAISY

Reference http://www.maisy.com/energy.htm

Abstract MAISY (Market Analysis and Information System) Databases have been developed from information on more than 800,000 individual utility customers throughout the US providing a representative sample of residential, commercial and industrial customers for regions, states and utility service areas. Large customer samples v states and service areas maintain the diversity of actual customer populations, providing a more accurate analysis of customers, markets and market segments compared to "average" customer information. For inst market analysis of "average" grocery store hourly loads provides a single result which is applicable only to customers whose energy use characteristics are close to the average whereas MAISY Database systems provide information on the whole range of grocery store customers in the population.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☑

Title Technology Transfer Network Air Quality System

Author

Publication_Name EPA

Reference http://www.epa.gov/ttn/airs/airsaqs/index.htm

Abstract This Air Quality System (AQS) technical area is designed primarily for AQS users (state, tribal and local age management, EPA Regional Offices, consultants, and environmental group.) It provides information about th use of the AQS application, software downloads, file formats, background project information, and events special interest to personnel working with data for the AQS.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title Technology Transfer Network Clean Air Technology Center RACT/BACT/LAER Clearinghouse

Author

Publication_Name EPA

Reference http://cfpub1.epa.gov/rblc/htm/bl02.cfm

Abstract The RACT/BACT/LAER Clearinghouse(RBLC) database contains information distilled from early notification submittals and air permits received from State and local air pollution control programs in the United States. TI RBLC Web site also contains summary information on air pollution emission standards. The data assists State/local agency personnel and private companies in determining what types of controls and pollution prevention measures have been applied to and/or are required for various sources and the effectiveness o technologies.
The RBLC Database Query option lets a user interactively query the permit database and the regulation data

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title International Toxicity Estimates for Risk

Author

Publication_Name ITER

Reference http://www.tera.org/iter/

Abstract ITER is a free Internet database of human health risk values for over 500 chemicals of environmental concer from several organizations worldwide. Only Glossary captured.

Rating: 2 **Available Electronically.** ☑ **Fee Required.** ☐

Survey_Results

Item_Type Database

Title IRIS - Integrated Risk Information System

Author

Publication_Name IRIS

Reference http://www.epa.gov/iriswebp/iris/

Abstract IRIS is a database of human health effects that may result from exposure to various substances found in th environment. Only Description captured.

Rating: 2 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Item_Type Model

Title Integrated Planning Model (IPM)

Author

Publication_Name

Reference http://www.icfconsulting.com/Markets/Energy/doc_files/IPMglobal.pdf

Abstract The Integrated Planning Model (IPM®) is the ultimate tool for evaluating all facets of the electric power marke Since IPM's inception in the 1970s, ICF Consulting has utilized IPM for all major analyses of the power marke and to guide clients in making critical business decisions.

Rating: 5 ***Available Electronically.*** ☑ ***Fee Required.*** ☑

Title The National Energy Modeling System: An Overview 2003

Author

Publication_Name EIA

Reference http://www.eia.doe.gov/oiaf/aeo/overview/pdf/0581(2003).pdf

Abstract The National Energy Modeling System: An Overview 2003 provides a summary description of the National Er Modeling System (NEMS), which was used to generate the forecasts of energy production, demand, import and prices through the year 2025 for the Annual Energy Outlook 2003 (AEO2003), (DOE/EIA-0383(2003)), released in January 2003. AEO2003 presents national forecasts of energy markets five primary cases—a reference case and four additional cases that assume higher and lower economic gr and higher and lower world oil prices than in the reference case. The Overview presents a brief descriptior the methodology and scope of each of the component modules of NEMS. The model documentation reports l in the appendix of this document provide further details.

Rating: 5 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title UPLAN-NPM Model

Author

Publication_Name Energy OnLine

Reference http://www.energyonline.com/products/products.asp

Abstract NPM simulates the electricity market using market protocol, dispatches electricity with optimal AC power flo algorithm and determines nodal (locational marginal) prices.

Rating: 5 ***Available Electronically.*** ☑ ***Fee Required.*** ☑

Title Directory of Energy Information Administration Models 2002

Author

Publication_Name EIA

Reference http://www.eia.doe.gov/bookshelf/docs.html

Abstract Presents an alphabetical listing of all active models. Brief statements regarding each model's title, acronym, purpose, and status are given, followed by more detailed information on characteristics and requirements. Sources for additional information are identified.
Pages: 70, released: December 2002, periodicity: Annual, publication number DOE/EIA-0293(2002), contact Mary Ellen Golby (202) 586-1094

Rating: 4 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Item_Type Model

Title MAISY Utility Service Area DG Policy Models

Author

Publication_Name MAISY

Reference http://www.maisy.com/udganal.htm

Abstract Basic Utility Service Area DG Policy Models provide an assessment of the current economic potential of eng microturbines, turbines and fuel cells for current customers in every utility service area. Forty DG technolog characterizations are evaluated in the models based on manufacturer and industry data. A complete assess of DG potential applications is conducted including peak clipping applications, baseload systems, waste hea utilization for space heating, water heating and absorption air conditioners.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☑

Title NRRI Model Distributed Generation

Author

Publication_Name NRRI

Reference http://www.nrri.ohio-state.edu/programs/electric/distributedgeneration/data/national/modelfiles/modelprocedures.htm

Abstract These generic Model Procedures for Interconnection of Distributed Generation equipment ("Model Procedure to a distribution-level electric power system are intended for consideration, adoption, or adaptation by State regulatory commissions, their counterparts in local units of government, or by rural electric cooperative organizations. Regulatory orders, resolutions, rules, ordinances, or local laws required for the adoption or adaptation of these model procedures and agreements will be left to the organizations seeking to use them. that reason, no attempt is made to identify or recommend policy for such issues as price, cost responsibility fees, studies or construction, rate or tax treatment, preference for generation type or size, or jurisdictional s which are subject to local conditions and/or regulatory determination.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title The National Energy Modeling System: An Overview 2000

Author

Publication_Name EIA

Reference http://tonto.eia.doe.gov/FTPROOT/forecasting/05812000.pdf

Abstract The National Energy Modeling System: An Overview provides a summary description of the National Energy Modeling System (NEMS), which was used to generate the forecasts of energy production, demand, import and prices through the year 2020 for the Annual Energy Outlook 2000 (AEO2000), (DOE/EIA-0383(2000)), released
in November 1999. AEO2000 presents national forecasts of energy markets for five cases—a reference case and four additional cases that assume higher and lower economic growth and higher and lower world prices than in the reference case. The Overview presents a brief description of the methodology and scope each of the component modules of NEMS. The model documentation reports listed in the appendix of this document
provide further details.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Air Dispersion Models on EPA SCRAM site

Author

Publication_Name EPA

Reference http://www.epa.gov/scram001/tt22.htm

Abstract The models offered in this area are currently listed in Appendix A of the Guideline on Air Quality Models (published as Appendix W of 40 CFR Part 51). See Appendix A of the Guideline, posted on the Modeling Guidance page of this website for a summary description of these models:
BLP, CALINE3, CDM2, CTDMPLUS, ISC3, OCD, RAM and UAM-IV.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Survey_Results

Item_Type Model

Title Government Energy Market Segment Evaluation Tool (GEMSET)

Author Richard E Weinstein

Publication_Name

Reference http://www2.epix.net/~parsons/EvalPLANhome/EvalPFrameset.html

Abstract The GEMSET product promotes the reasoned evaluation of the economic and environmental prospects of fo elecrtric power generation technologies in the various regions of the United States. The evaluations and toc the GEMSET product allow assessment of the existing plant invenstment and return conditions throughout th U.S. These tools and assessments allow the investigation of different environmental, demand, and fuel pric scenarios that might exist in the various regions, and gives reasoned projections of where these circumsta might be in the future.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title NRRI Model Distributed Generation Interconnnection Procedures and Agreement

Author

Publication_Name NRRI

Reference http://www.nrri.ohio-state.edu/programs/electric/DistributedGeneration/newbie.html

Abstract This is an introduction to the NARUC model Procedures and agreement and includes their purpose and how were developed. This also includes acknowledgement to those persons who have contributed directly to th development of the model and the associated resource documents.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Paper

Title Evaluation of Fuel Cell Auxiliary Power Units for Heavy Duty Diesel Trucks

Author Christie-Joy Brodrick et al

Publication_Name The eScholarship Repository June 1, 2002

Reference http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1015&context=itsdavis

Abstract A large number of heavy duty trucks idle a signifcant amount. Heavy duty line haul engines idle about 20 - 4 the time the engine is running, depending on season and operation. Drivers idle engines to power climate co devices (e.g., heaters and air conditioners) and sleeper compartment accessories (e.g., refrigerators, micr ovens, and televisions) and to avoid startup problems in cold weather. Idling increases air pollution and ene use, as well as wear and tear on engines. E orts to reduce truck idling in the US have been sporadic, in part because it is widely viewed in the trucking industry that further idling restriction would unduly compromise c comfort and truck operations. The auxiliary power unites (APUs) available to replace the idling of the diesel traction engine all have had limited trucking industry acceptance. Fuel cells are a promising APU technology. Fuel cell APUs have the potential to greatly reduce emissions and energy use and save money. IN this pape estimate costs and bene ts of fuel cell APUs. We calculate the payback period for fuel cell APUs to be abou 2.6-4.5 years. This estimate is uncertain since future fuel cell costs are unknown and cost savings from idli vary greatly across the truck eet. The payback period is particularly sensitive to diesel fuel consumption at Given the large potential environmental and economic bene ts of fuel cell APUs, the rst major commercial application of fuel cells may be as truck APUs.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Homeland Security Is the Distributed Energy Industry Missing Its Opportunity—and Contribution?

Author Ritchie Priddy

Publication_Name Cambridge Energy Research Associates, Inc.,

Reference http://www.cera.com/home/

Abstract Security improvements have been implemented at high-profile infrastructure targets such as nuclear power and dams. Yet very little has been done to protect the energy delivery infrastructure. The transportation anc distribution networks are large, visible, and impossible to fully protect. Coordinated and even isolated attack have serious consequences.
Distributed energy (DE) may be one of the most effective tools to mitigate the consequences of an attack on power infrastructure by
• placing DE assets along key energy corridors and must-run facilities, such as industrial parks and financia centers
• siting the equipment on the customer's premises to increase security
• wiring the assets to provide emergency power to nearby facilities using, if necessary, existing grid asset

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Integration of Distributed Energy Resources The CERTS MicroGrid Concept

Author

Publication_Name Office of Power Technologies

Reference http://eetd.lbl.gov/ea/CERTS/pdf/LBNL_50829.pdf

Abstract Evolutionary changes in the regulatory and operational climate of traditional electric utilities and the emergen smaller generating systems such as microturbines have opened new opportunities for on-site power gener by electricity users. In this context, distributed energy resources (DER) - small power generators typically lo at users' sites where the energy (both electric and thermal) they generate is used - have emerged as a pro option to meet growing customer needs for electric power with an emphasis on reliability and power quality portfolio of DER includes generators, energy storage, load control, and, for certain classes of systems, adv power electronic interfaces between the generators and the bulk power provider. This white paper propos the significant potential of smaller DER to meet customers' and utilities' needs can be best captured by organizing these resources into MicroGrids.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Paper

Title Modeling Distributed Electricity Generation in the NEMS Buildings Models

Author

Publication_Name EIA OIAF

Reference http://www.eia.doe.gov/oiaf/analysispaper/pdf/distgen.pdf

Abstract Distributed generation refers to the production of electricity in a decentralized facility—in the present contex building. This "nontraditional" electricity source has the advantage of allowing the capture of the "waste" hea generation, thereby offsetting the energy requirements of other end uses and potentially lowering total ener requirements across multiple end uses (i.e., the combined requirements for electric energy, space heating energy, and water heating energy). This paradigm contrasts with central generation, where waste heat is c negative externality that is emitted directly into the biosphere. In addition to utilizing heat energy that would otherwise be wasted, on-site generation has the additional efficiency benefit of avoiding the transmission a distribution losses associated with centralized generation and, possibly, the need for upgrades to transmiss and distribution grids. Currently, the National Energy Modeling System (NEMS) buildings models characterize several distributed generation technologies: conventional oil or gas engine generation, combustion turbine technologies, and newer, still developing technologies such as solar photovoltaics (PV), fuel cells, and microturbines. This paper describes the modeling techniques, assumptions, and results for the Annual Ener Outlook 2000 reference case. In addition, a series of alternative simulations are described, and key results f distributed generation are presented.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Potential Benefits of Utilizing Fuel Cell Auxiliary Power Units in Lieu of Heavy-Duty Truck Engine Idling

Author Christie-Joy Brodrick et al

Publication_Name The eScholarship Repository January 1, 2001

Reference http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1016&context=itsdavis

Abstract Truck manufacturers and vehicle component manufacturer are exploring using fuel cell auxiliary units (APUs lieu of main engine idling. While fuel cell powertrains continue to face signi cant technical and economic barriers, the truck auxiliary power application may offer a viable near-term market for small (1-5kW) fuel cell The University of California, Davis Institute of Transportation Studies (ITS-Davis) has conducted a study to quantify the potential bene ts of utilizing APUs in lieu of truck idling. ITS-Davis researchers estimated the potential reductions of (1) air pollutants and greenhouse gases and (2) heavy truck fuel and lubricant consumption through elimination of truck idling. For new tractors, idling is estimated to contribute 0.2 to 0.7 metric tons of nitrogen oxide emissions and 8-24 tons of carbon dioxide per vehicle per year. Thus, dependi upon the emissions from fuel cell system production, fuel cell APUs in lieu of idling could substantially reduce pollution emissions and greenhouse gas emissions.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Residential Distributed Energy - Will it Expand Beyond the Standby Market?

Author Jim Fay, Nicholas Lenssen

Publication_Name PRIMEN

Reference http://www.primen.com/index.asp

Abstract Residential distributed energy (DE) systems for single-family homes have always been the holy grail of DE product developers — a mass market product with millions of potential sales. Yet, the smaller system sizes this market have also presented the toughest economic and technical hurdles. The only DE products that ha shown real penetration into homes in North America have been standby systems, though there's a growing interest and market for PVs, particularly in California.
Residential energy users also say they're interested in onsite generation systems that can provide baseload power, but their interest rapidly diminishes once they learn what the price for such a system would be. This Perspectivelooks at the evolution and growth of the residential DE market in the last 2 years, and how it migl unfold in the next 3-5 years.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☑

Survey_Results

Item_Type Paper

Title Assessing Utility Market "Headroom": Pitfalls of Traditional Analysis

Author

Publication_Name MAISY

Reference http://www.maisy.com/isight6.htm

Abstract Use of aggregate customer-segment load shapes in headroom, or profitability analysis generates unreliable results
Determining which competitive markets to enter is one of the most critical strategic decisions facing energy service providers (ESPs) as deregulation continues to creep across state landscapes. The investment requ enter new utility markets is substantial; every state plan differs and many rules are subject to change. Head analysis, i.e., estimation of the difference between current electric rates and the cost of serving customers conducted as part of a decision process which results in a "go" or "no-go" decision concerning new marke activity.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title ATA Comments on the EPAs Proposed Rule SIP Texas Low Emission Diesel Fuel

Author

Publication_Name TruckLine

Reference http://www.truckline.com/insideata/litcenter/epa_comments.pdf

Abstract The American Trucking Associations, Inc. (“ATA”) is pleased to submit the following comments in response the United States Environmental Protection Agency’s (“EPA”) Notice of Proposed Rulemaking entitled “Appro and Promulgation of Air Quality State Implementation Plans (SIP); Texas: Low Emission Diesel Fuel,” 66 Fede Register 20415 (April 23, 2001) (the “Proposed Rule”).
ATA is the trade association representing the American trucking industry. As the national representative of trucking industry, ATA is vitally interested in matters affecting the nation’s trucking fleet, including the depart from a single national diesel fuel standard for on-road sources. For this reason, ATA is submitting these comments on the Proposed Rule.
The membership of ATA strongly supports the achievement of cleaner air and the protection of human healt the environment. At the same time, ATA has serious concerns regarding the Proposed Rule, its impact upon nation’s supply of diesel fuel, and its consistency with the purposes and requirements of the federal Clean (“CAA” or the “Act”).

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Distributed Generation Technology and Market Analysis Available for More than 200 Electric Utility Service A

Author

Publication_Name MAISY

Reference http://www.maisy.com/pr26.htm

Abstract Durham, NC. November 14, 2001. Jackson Associates today introduced DG-USA (Distributed Generation - Utility Service Area), a database, software and analysis system which provides detailed energy use, hourl economic, technology and market analysis of distributed generation technologies including engines, turbines microturbines, fuel cells and other technologies for more than 200 utility service areas across the US and C

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Distributed Generation: The New Pivotal Issue for Electric Utilities

Author Richard T. Stuebi

Publication_Name Electric Power 2000, Cincinnati, April 2000

Reference http://www.nextwave-energy.com/pdf/DGPivotal.pdf

Abstract Distributed generation (DG) technologies will increasingly penetrate a growing share of electricity markets c the next decade. This impending emergence of DG represents an extremely complex and disconcerting issu electric utilities. To combat these threats and begin repositioning, electric utilities must begin now to make the topic of DG central — not tangential — to their future business development.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Paper

Title Encouraging distributed generation of power that improves air quality: can we have our cake and eat it too?

Author Allison, Juliann Emmons; Lents, Ji

Publication_Name Energy Policy, Jul2002, Vol. 30 Issue 9, p737, 16p, 5 charts, 1 diagram, 11 graphs

Reference http://www.powerlibrary.net/Remote/Remote.asp Business Source Elite

Abstract Evaluates the governance structure responsible for regulating energy and environmental policy in the U.S. Categories of air pollution; Analysis of the electricity generation process with heat recovery; Approach for ensuring greater air quality.

Rating: 4 **Available Electronically.** ☐ **Fee Required.** ☐

Title EPA Proposal on Nonroad Diesel Engines and Fuel Sulfur Standards.

Author

Publication_Name

Reference http://www.bna.com/bnaplus/docs/doc_ens.html

Abstract An Environment Protection Agency document indicates the agency is weighing different approaches to achi the same major cuts in pollution from nonroad diesel engines such as construction and farm equipment that i already has mandated for engines powering highway vehicles. Oct. 30, 2002. 94 pp. $27.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☑

Title Fuel Cells Green Power

Author

Publication_Name Los Alamos Education Resources

Reference http://education.lanl.gov/resources/fuelcells/fuelcells.pdf

Abstract The Automobile, it is fair to say, changed the industrial and social fabric of the United States and most count around the globe. More people are driving more cars in 1999 than ever before - more than 200 million vehicl on the road in the U.S. alone. But the car has contributed to our air and water pollution and forced us to rely imported oil, helping to create a significant trade imbalance. Today many people think fuel cell technology wil a pivotal role in a new technological renaissance - just as the internal combustion engine vehicle revolutioniz life at the beginning of the 20th century. Today's innovations in fuel cell technology are addressing local, nat and global environmental needs. The decision to become involved with bringing these innovations into our da lives is a strategic career opportunity. Fuel cells offer an opportunity for innovation. Helping to make fuel cell a part of the solution might be a challenge that's too exciting to ignore.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Survey_Results

Item_Type Paper

Title Fuel Effects on Fuel Reforming Operation and Start-up for Transportation Fuel Cell Systems

Author Rodney Borup

Publication_Name AICHE, Fuel Processing Session I: Modeling and System Integration Monday, March 31, 2003

Reference http://www.aiche.org/conferences/techprogram/paperdetail.asp?PaperID=657&DSN=spring03

Abstract Fuel cells have high efficiency for conversion fuel to electricity. However, most types of fuel cells do not ha power density and efficient operation directly from existing hydrocarbon fuels, thus require fuel reforming. T fuel used for fuel cells systems are likely to be different for differing fuel cell applications, and range from hydrogen, light hydrocarbons such as natural gas, to heavier hydrocarbons such as gasoline and diesel fue Potential transportation applications for fuel cells include both the prime mobility power and auxiliary power production on-board vehicles, operation of which may be with the heavier hydrocarbons. Fuel cell systems show long-term durability under challenging conditions to enable commercialization for transportation applica
Modeling Results
Modeling of air/steam/diesel fuel mixtures indicate that graphitic carbon is favored until relatively high steam content. Even though the thermodynamics are favorable for the formation of solid graphite, solid graphite do not actually form experimentally, even when the conditions are favorable for that formation. The carbon that is termed amorphous carbon to distinguish form graphite. There seem to be at least three amorphous forms are all slightly different and all have slightly different thermodynamic functions. Differences in pressure sho a slight change in the results. The temperature differences are more significant and it appears that the highe temperature the closer the similarity between the amorphous carbons and the graphite.

Experimental Results
The partial oxidation and steam reforming of diesel fuel components and kerosene has been conducted in comparison with traditional gasoline and gasoline components. In comparison to similar reactions with gasoli components, diesel fuels require an additional reactor residence time of about 4x for similar hydrocarbon conversion. Diesel fuel components were also found to be more susceptible to pre-combustion, when mixe air than comparable gasoline mixtures. Different types of kerosene were found to have different pre-ignition tendencies, depending upon deodorization. This complicates reactor design and operation, especially consid seasonal variations in diesel fuel characteristics.
Analysis of carbon formed during the partial oxidation and stream reforming of liquid hydrocarbons show di carbonaceous deposits depending upon operating and formation conditions. Carbon formed in the steam reforming sections appears to be 'amorphous' carbon, but still with a small amount of hydrogen present, wit overall composition of C1H0.2. This composition was estimated by initial weight change during TGA (thermogravimetric analysis). Carbon deposits also form downstream of a steam reformer with fuels contair aromatics; these carbonaceous materials contain about 30% by weight hydrocarbon.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title How are the new diesel fuel rules affecting supply, prices?

Author Emond, Mark

Publication_Name National Petroleum News, Nov93, Vol. 85 Issue 12, p12, 1p, 2 charts

Reference http://www.powerlibrary.net/Remote/Remote.asp EBSCO HOST search

Abstract Reports on how federal and California diesel fuel regulations are affecting availability and prices. Requireme new regulations; Impact; Statistics; Anticipated problems.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☑

Survey_Results

Item_Type Paper

Title Liquid Fuel Reformer Development Autothermal Reforming of Diesel Fuel

Author C. Pereira, J-M Bae, S. Ahmed, and M. Krumpelt

Publication_Name U.S. Department of Energy 2000 Hydrogen Program Technical Review San Ramon, California

Reference http://www.eren.doe.gov/hydrogen/pdfs/28890ss.pdf

Abstract Argonne National Laboratory is developing a process to convert hydrocarbon fuels to clean hydrogen feed polymer electrolyte fuel cell. The process incorporates an autothermal reforming catalyst that can process hydrocarbon feeds at lower temperatures than existing commercial catalysts. We have tested the catalyst three diesel-type fuels: exadecane, certified low-sulfur grade 1 diesel, and a standard grade 2 diesel. Hexadecane yielded products containing 60% hydrogen on a dry, nitrogen-free basis at 850°C, while maxim hydrogen product yields for the two diesel fuels were near 50%. Residual products in all cases included CC CO2, ethane, and methane. Further studies with grade 1 diesel showed improved conversion as the water ratio was increased from 1 to 2 at 850°C. Soot formation was reduced when the oxygen:carbon ratio was maintained at 1 at 850°C. There were no significant changes in hydrogen yield as the space velocity and the oxygen:fuel ratio were varied. Tests with a microchannel monolithic catalyst yielded similar or improved hyd levels at higher space velocities than with extruded pellets in a packed bed.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Micropower The Next Electrical Era - Worldwatch Paper 151

Author Seth Dunn

Publication_Name Worldwatch Paper 151

Reference http://www.worldwatch.org/pubs/paper151.html

Abstract Electricity is returning to its origins: generating power on a relatively small scale, close to where it is actually Technological, economic, and environmental trends are turning a family of "micropower" devices into increa viable choices for meeting electrical needs. Use of these generators can avoid expensive investments in lar central power stations and transmission and distribution systems, provide greater reliability, and leave a ligh ecological footprint. July, 2000 ISBN 1-878071-53-x

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Plasma Reforming of Diesel Fuel

Author L. Bromberg, A. Rabinovich, N. Alexeev,and D.R. Cohn

Publication_Name American Chemical Society Meeting, Annaheim CA (March 1999)

Reference http://www.psfc.mit.edu/library/99ja/99ja004/99ja004_full.pdf

Abstract The use of a plasma reformer for the generation of hydrogen rich gas from diesel fuel has been investigate system that is normally used for investigating natural gas reforming has been modified in order to investigate reforming of heavy liquid fuels. The composition of the reformate has been investigated as a function of the composition of the reagents. The use of a one-step reformer/water shifter was studied. Good reforming, wi noticeable soot production, was obtained. The specific energy consumption was equal to that previously ob with methane reforming, with much reduced concentration of methane in the reformate.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Paper

Title Reliability and Distributed Generation AN ARTHUR D. LITTLEWHITE PAPER

Author

Publication_Name DTE Energy Technologies

Reference http://www.dtetech.com/pressroom/pdf/reliability2000.pdf

Abstract This white paper describes the reliability problems that have developed within the U.S. electric power syste demonstrates how Distributed Generation (DG) can provide an effective solution to those problems for both system and individual customers. Additional economic, technical, and policy context for these policy discuss is provided by three other white papers in this series: "Distributed Generation: Understanding the Economics "Distributed Generation: System Interfaces," and "Distributed Generation: Policy Framework For Regulators." These discussion documents are designed to assist regulators, legislators, and other interested parties in understanding and evaluating issues associated with DG as they develop informed policies that will shape t future of the US electricity industry.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Solid Oxide Fuel Cell Auxiliary Power Unit

Author Zizelman, Shaffer, Mukerjee

Publication_Name Delphi Automotive Systems

Reference http://www.delphi.com/pdf/techpapers/2002-01-0411.pdf

Abstract Delphi Automotive Systems and BMW are jointly developing Solid Oxide Fuel Cell (SOFC) technology for application in the transportation industry primarily as an onboard auxiliary power unit (APU). In the first application of this joint program, the APU will be used to power an electric air conditioning system without th need for operating the vehicle engine.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title The Role of Distributed Generation in Competitive Energy Markets

Author

Publication_Name Gas Reasearch Institute

Reference http://www.gri.org/

Abstract Small power generation units (typically less than 30 MW) strategically located near consumers and load cer that provide benefits to customers and support for the economic operation of the existing power distribution This paper describes the role of distributed generation (DG) in current and emerging energy markets. The discussion focuses on the following topics: DG Technologies, Applications for DG, Benefits of DG, Electric Industry Restructuring, Stakeholder Roles and Perspectives,

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Using Distributed Energy Resources

Author

Publication_Name NREL

Reference http://www.nrel.gov/docs/fy02osti/31570.pdf

Abstract As one of today's busy Federal facility or energy managers, you may be seeking ways to solve problems s high energy costs or low electric power reliability at your facility. If so, distributed energy resources (DER) c be the solution you're looking for.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Paper

Title A Comparison of Emissions From Clean Diesel Fuels

Author Mitsuru Uchida and Yukio Akasaka

Publication_Name International Congress & Exposition, March 1999, Detroit, MI, USA, Session: Alternative Fuels for CI Engines

Reference http://www.sae.org/servlets/productDetail?PROD_TYP=PAPER&PROD_CD=1999-01-1121

Abstract A Comparison of Emissions From Clean Diesel Fuels

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☑

Title ATA Comments on the EPA OTAQs Report The Effects of Cetane Number Increase Due to Additives on NOx Emissions from Heavy Duty Highway Engines

Author

Publication_Name TruckLine

Reference http://www.greentruck.com/air_emissions/ata_cetane_final.pdf

Abstract The American Trucking Associations, Inc. (“ATA”) submits the following comments in response to the U.S. Environmental Protection Agency’s (“EPA” or “Agency”) Draft Technical Report entitled The Effects of Cetan Number Increase Due to Additives on NOx Emissions from Heavy-Duty Highway Engines (‘Draft Technical Report”).1
ATA is the trade association representing the American trucking industry) As the national representative of trucking industry, ATA is vitally interested in mafters affecting the nation’s trucking fleet, including the use o boutique diesel fuels.3 The membership of ATA strongly supports the achievement of cleaner air and the protection of human health and the environment. At the same time, ATA has serious concerns regarding EP efforts to quantify NOx reductions by increasing the cetane number of diesel fuel (“cetane controls”). This e will encourage states to depart from the national diesel fuel standard in an aftempt to secure additional NOx reduction credits.
ATA is particularly concerned over the inaccuracy of the technical report. On October 26, 2001, ATA submi comments to EPA on its staff discussion document entitled Strategies and Issues in Correlating Diesel Fuel Properties with Emissions and EPA’s proposed Diesel Fuel Impact Model (“DFIM”). ~ At that time, ATA contracted with Sierra Research, Inc. (“Sierra”) for assistance in evaluating the report and the DFIM. Sierra’ report concluded that EPA’s proposed DFIM did not accurately predict emissions changes resulting from var fuel parameters (See Aftachment A).5 EPA’s efforts to quantify the effects of cetane controls under the Dra Technical Report suffer from the same deficiencies as the DFJM since the methodology and database are similar. There are several reasons that the proposed quantification does not work, the most significant is tha data from which the predictive equations were derived are not representative of the fuels and engines that dominate our nation’s roadways.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title Comparison of In-Use Emissions From Diesel and Natural Gas Trucks and Buses

Author Chris S. Weaver and Marco Balam

Publication_Name International Truck & Bus Meeting & Exposition, December 2000, Portland, OR, USA, Session: Natural Gas Vehicles

Reference http://www.sae.org/servlets/productDetail?PROD_TYP=PAPER&PROD_CD=2000-01-3473

Abstract Comparison of In-Use Emissions From Diesel and Natural Gas Trucks and Buses

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☑

Item_Type Paper

Title Distributed Renewable Energy & The Environment: Developed Nation Drivers and Barriers

Author Joel N. Gordes

Publication_Name Environmental Energy Solutions

Reference http://home.earthlink.net/~jgordes/DR-Columbia.PDF

Abstract More than anything it has been technology which has driven deregulation of the electric industry since it bec possible to capture high thermal efficiency, once only afforded to large steam plants, in relatively small gas turbines which could be economically located for on-site use. Due to the environmental excellence of combi cycle gas turbines and even a new generation of simple cycle turbines which will proliferate under utility restructuring, many of the traditional environmental drivers such as toxic air emissions will no longer stand a most powerful arguments for renewable energy. Other short-term arguments which are economic-based s reliability, power quality and energy security will be in the forefront before longer term environmental drivers again become preeminent.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Solid-oxide fuel cell auxiliary power unit: a paradigm shift in electric supply for transportation

Author by James Zizelman and Dr. Jean Botti of Delphi Automotive Systems and Joachim Tachtler and Wolfgang Str of the BMW Group

Publication_Name

Reference http://www.delphi.com/pdf/techpapers/solid_oxidetech.pdf

Abstract Delphi Automotive Systems is developing SOFC systems for automotive applications. This program, started i 1999 in a joint effort with BMW, has demonstrated the basic viability of using a SOFC system as an automot APU (1). This article describes the trend to high-power and highefficiency electrical systems and the role th cells may have in this trend to vehicle electrification. It compares proton exchange membrane (PEM) and SOF technologies in achieving this high-performance electrical system. It continues with a description of the SOF APU mechanization with discussion of several of the key subsystems. It concludes with some vision on tar applications and future mechanizations.

Rating: 3 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title BP plc Impact of our Products

Author Ernst and Young

Publication_Name BP plc

Reference http://www.bp.com/environ_social/environment/impact_products/index.asp

Abstract We use approximately 10% of the fossil fuel we extract to power our operations, and supply the remaining our customers. The impacts of our products on global warming and other environmental issues associated burning fossil fuels are therefore much more extensive than the impacts from our own operations. We reco the need to produce cleaner products and work with others to increase their efficient use in order to reduce environmental impact of our products.
Our approach to this challenge is a combination of initiatives, many in partnership with other industries and organizations. Some of these will reduce the impact of our products in the short term. Others are dependent technological development and will deliver future environmental benefits.

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title ECONOMIC WHITE PAPER Comparing CNG and Low Sulfur Diesel Fuel/Vehicles

Author

Publication_Name EC-Diesel

Reference http://ecdiesel.com/whtpapercng.html

Abstract Low sulfur diesel fuel, coupled with after-treatment, provides comparable particulate emissions to compress natural gas (CNG) vehicles. However, low sulfur diesel and after-treatment can achieve this beneficial emis performance much more cost-effectively than CNG.

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Item_Type Paper

Title FREEDOMAIR for Diesel Engines: Low Engine-Out Emissions of NOx and PM with High Power Density

Author Robert M. Rutherford and Paul F. Dunn

Publication_Name Rotec Design Ltd

Reference http://www.rotecdesign.com/TechPaper/page1.htm

Abstract DI diesels continue to be strongly challenged by the projected TierII/ULEV and Euro IV emissions standards. These limits presently appear beyond the diesel's practical reach.
While the DI diesel engine can offer advantages in a wide variety of applications, its future use will be large dictated by its ability to make significant progress in the area of emissions reduction.
This paper describes the current focus of diesel engine emissions reduction, and a novel method of achievi lower emissions of both NOx and PM, while retaining or improving torque/power density and fuel efficiency. Cycle changes such as the proposed FREEDOMAIR system could offer a solution to the industry in meeting regulatory requirements within acceptable cost and build parameters, whilst still offering complementary sol to proposed technologies such as the lean NOx catalyst if and when these technologies come on stream.
A high performance advanced air scavenging system such as FREEDOMAIR described below can offer a h excess air ratio operation with high power density, improved fuel conversion efficiency and dramatically re NOx, smoke and particulates.
Importantly, these improvements are "at -source".

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Fuel Effects on Diesel Combustion Processes

Author Clasen, E.; Song, K.; Campbell, S.; Rhee, KT

Publication_Name RUTGERS - THE STATE UNIV NEW BRUNSWICK NJ DEPT OF MECHANICAL INDUSTRIAL AND AEROSPACE ENGINEERING

Reference http://stinet.dtic.mil/cgi-bin/fulcrum_main.pl?database=ft_u2&searchid=104214441512143&keyfieldvalue=ADA321748&filename=%2Fcrum%2Fdata%2FTR_fulltext%2Fdoc%2FADA321748.pdf

Abstract The crank angle locations for the first occurrences of several main combustion events in a Diesel engine we investigated for varied fuel parameters. The events studied include: preflame reactions; premixed flame propagation; start of pressure rise; maximum rate of pressure rise (dp/dt); and peak cylinder pressure. The employed in the study were in two groups: (1) Base fuel-1 and derivatives prepared by mixing it with small of a cetane number (CN) enhancing additive; and (2) Base fuel-2 and those made by adding different amou bio-Diesel fuel. The experiment was performed by using a single-cylinder direct-injection (DI) Diesel engine equipped with an electronically controlled high-pressure fuel injection unit. The in-cylinder processes during periods of ignition delay and combustion reaction were measured by using a high-speed multispectral infrar (IR) imaging system developed at Rutgers University. The other events were found from the pressure- time history. The purpose of using these fuels was to investigate: additive effects on the (invisible) preflame rea and visible premixed flame development; flame behaviors of bio-Diesel fuels; CN effects on in-cylinder react and others. There is some evidence that the formation of the visible flame kernels may not be directly relatec the preflame reactions when the additive is used to increase CN. The reactions during the ignition delay of b Diesel fuels were rather unpredictable, therefore requiring additional investigation. Among the most indicativ timelines for determining a fuel's CN were those of: the maximum dp/dt; the start of pressure rise; the first premixed flame; and the peak pressure. The timeline of maximum dp/dt seems to be most insensitive to the variation of injection timing. Some new findings are also reported in the paper. ANNOTATION: Reprint: Fuel Effects on Diesel Combustion Processes.

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Emissions From Buses With Ddc 6v92 Engines Using Synthetic Diesel Fuel

Author Paul Norton and Keith D. Vertin etc

Publication_Name International Fuels & Lubricants Meeting & Exposition, May 1999, Dearborn, MI, USA, Session: Alternative Fu

Reference http://www.sae.org/servlets/productDetail?PROD_TYP=PAPER&PROD_CD=1999-01-1512

Abstract Emissions From Buses With Ddc 6v92 Engines Using Synthetic Diesel Fuel

Rating: 1 ***Available Electronically*** ☑ ***Fee Required*** ☑

Survey_Results

Item_Type Paper

Title ExxonMobil Products and Services Diesel

Author

Publication_Name ExxonMobil

Reference http://www.exxon.com/USA-English/GFM/Products_Services/Fuels/Diesel_Fuels.asp

Abstract We provide two quality grades of diesel fuel. Each is produced and held up to the highest standards for you your vehicle. In addition, we market a premium diesel fuel for those who want the benefits of detergency a improved lubricity. Our diesel fuels are also available to commercial and industrial accounts through a varie sales channels, including bulk delivery. For more information on how to buy bulk diesel fuel, please contact

Rating: 1 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Presentation

Title Associated Barriers to Distributed Generation

Author

Publication_Name Distributed-Generation.com

Reference http://www.distributed-generation.com/Library/UIT_Cutler.pdf

Abstract DG System Topics
System Coordination Issues
Present Day UIT System Issues
Power Quality Concerns
Utility/Regulating Body Paradigm Shift

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Distributed Generation Air Quality Considerations

Author JN Carras

Publication_Name

Reference http://www.cendep.csiro.au/pdf/j_carras.pdf

Abstract Summary
• The air quality issues associated with DG include NOx, Ozone and PM
• The potential air quality impact of DG need to be assessed carefully as interactions between emissions, meteorology and chemistry are complex
• Emission rates of pollutants under actual operating conditions are required
• New tools are constantly being developed for impact assessment

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Emissions from Distributed Generation

Author

Publication_Name Distributed-Generation.com

Reference http://www.distributed-generation.com/Library/Emissions.PDF

Abstract A summary of air emissions from DG equipment presented to the California Energy Commission on April 20, 2000, by Sheryl Carter.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Fuel Cell Initiatives and Future Applications in the U.S. Navy and U.S. Marine Corps

Author Dr. Richard T. Carlin

Publication_Name Solid State Energy Conversion Alliance Workshop

Reference http://www.seca.doe.gov/Events/Arlington/Carlin%20SECA%20Presentation.pdf

Abstract Presentation from Second Solid State Energy Conversion Alliance Workshop Arlington, Virginia March 29-3(2001

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Presentation

Title Will Increasing the Use of Distributed Generation Cause Brownouts in Air Quality?

Author

Publication_Name EPA

Reference http://www.eere.energy.gov/der/pdfs/mid_atlantic_conf_02/judy_dg.pdf

Abstract Peak load days most often occur in the hot summer months and may correspond with Ozone alert days - a t
time for NOx emissions and diesel generators. In order to expand the use of DG while maintaining clean air i
be necessary to encourage the employment of new DG technologies such as fuel cells, gas microturbines,
photovoltaic and wind, while simultaneously imposing mandatory pollution controls on diesel units.

Rating: 5 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Distributed Generation Its Role in Emerging Economies

Author Rajat K. Sen Chris Namovicz Jennifer Kish

Publication_Name SENTECH, INC.

Reference http://www.nrel.gov/china/pdfs/re_forum/distributed_generation.pdf

Abstract Distributed generation is defined as “retail power” sited either on or in close proximity to the end-user.
- Located on “Power Distribution System”. - Potential size varies from 5 kW to 50 MW.
- Distributed Resources includes both distributed generation and the enabling technologies which provide fo
integration, communication and control of the asset in electrical distribution systems.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Distributed Generation Operational Reliability and Availability Database

Author

Publication_Name EERE - DER

Reference http://www.eere.energy.gov/distributedpower/research/distributed_gen_database.html

Abstract Many distributed generation systems are in operation across the country and around the world. Knowing th
performance history of these systems can help others considering distributed generation select appropriate
technologies and arrangements for their specific needs.
Through DOE, operational reliability data for various distributed generation systems is being collected in a
database. This database will not only help potential distributed generation users but also quantify the potenti
benefits of such systems for policymakers.
Industrial DG Market Transformation Tools: DG Operational Reliability and Availability Database (PDF 1.92 MB
Presented at the Distributed Power Program Quarterly Review, July 2002, in Madison, Wis.
Industrial DG Market Transformation Tools (PDF 348 KB). Presented at the Distribution and Interconnection
R&D Annual Review, 2003, in Arlington, Va.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title DR Cost Impacts on T&D Systems

Author

Publication_Name Distributed-Generation.com

Reference http://www.distributed-generation.com/Library/DR_Cost_Impacts_on_T&D.pdf

Abstract What’s the DR Market Opportunity
Facilities use DR to generate power on-site in lieu of grid purchases
Cutting energy costs is a primary motivation, but boosting reliability and quality of power is also a driver
Getting closer examination – DR as an alternative to T&D construction

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Item_Type Presentation

Title ECEEE - 2001 Energy Web

Author Mike Hoffman,

Publication_Name BPA

Reference http://www.bpa.gov/energy/n/tech/energyweb/docs/slidespubs/eceee - 2001 energy web.pdf

Abstract Where did the Energy Web concept come from:
The past versus the future - centralized versus web resources
Examples of the Energy Web - associated issues & benefits
Generation, renewables, enabling technologies What BPA has done in the last year
What BPA is planning to do in the next year

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Fuels and Emissions: Lessons Learned in the U.S.

Author Lester Wyborny II Lester Wyborny II U.S. Environmental Protection U.S. Environmental Protection Agency

Publication_Name Asian Development Bank Conference

Reference http://www.adb.org/Documents/Events/2001/RETA5937/New_Delhi/documents/nd_04_wyborny.pdf

Abstract Presentation from Asian Development Bank Conference on Fuel Quality & Alternative Fuels 2-4 May 2001, N Delhi, India

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title SITING OF DR UNITS: RULES OF THE GAME

Author

Publication_Name Distributed-Generation.com

Reference http://www.distributed-generation.com/Library/DR_Siting_Rules.pdf

Abstract The siting game
What DR is being sited?
How are siting rules evolving?
Who is siting/installing DR?
Eight guidelines for DR siting

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title The Move to Cleaner Fuels An Oil Industry Perspective

Author Alan Gissing Senior Fuels Engineer BP Australia

Publication_Name Asian Development Bank Conference

Reference http://www.adb.org/Documents/Events/2001/RETA5937/New_Delhi/documents/nd_05_gissing.pdf

Abstract Presentation from Asian Development Bank Conference on Fuel Quality & Alternative Fuels 2-4 May 2001, N Delhi, India

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Transportation Technology for the 21st Century Fuel Cells

Author

Publication_Name NREL

Reference http://www.nrel.gov/china/pdfs/re_forum/transportation_technology_fuel_cells.pdf

Abstract Outline of Presentation; Fuelcells – Basic Principles, Technology Overview; Industry Activity – Development Fuel Cell Vehicles; Sustainable Transportation – Strategic Implications of Fuel Cells – Fuel Choice

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Presentation

Title Diesel Exhaust: Health Impacts and Control Programs

Author Mike McCarthy

Publication_Name 18th Annual Mobile Sources/Clean Air Conference 9/12/2002

Reference http://www.ncvecs.colostate.edu/cac.docs/cac18.docs/cac18pres/MMcCarthy2.pdf

Abstract Toxic Air Contaminant - an air pollutant which may cause or an air pollutant which may cause or contribute t increase in mortality or contribute to an increase in mortality or in serious illness, or which may pose a in se illness, or which may pose a present or potential hazard to human present or potential hazard to human hea Properties of Diesel Properties of Diesel Exhaust - Includes over 40 substances listed by the U.S. EPA as Hazardous Air Pollutants and U.S. EPA as Hazardous Air Pollutants and the Air Resources Board as Toxic A the Air Resources Board as Toxic Air Contaminants

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title Health and Environmental Impacts of Motor Vehicle Emissions

Author Michael P. Michael P. Walsh

Publication_Name Asian Development Bank Conference

Reference http://www.adb.org/Documents/Events/2001/RETA5937/New_Delhi/documents/nd_01_walsh.pdf

Abstract Presentation from Asian Development Bank Conference on Fuel Quality & Alternative Fuels 2-4 May 2001, N Delhi, India

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title Vehicle Technology Programs

Author Thomas J. Gross
Deputy Assistant Secretary

Publication_Name Solid State Energy Conversion Alliance Workshop

Reference http://www.seca.doe.gov/Events/Arlington/Gross%20SECAworkshopMarch01.pdf

Abstract Presentation from Second Solid State Energy Conversion Alliance Workshop Arlington, Virginia March 29-3(2001

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title Voluntary Diesel Retrofit Program

Author Jim Blubaugh

Publication_Name 18th Annual Mobile Sources/Clean Air Conference 9/12/2002

Reference http://www.ncvecs.colostate.edu/cac.docs/cac18.docs/cac18pres/JBlubaugh.pdf

Abstract What is the Voluntary Diesel Retrofit Program? • A voluntary program designed to install pollution-reducing technology on existing diesel vehicles and equipment. We are building a market for clean diesel concepts – Accelerating the delivery of ULSD Accelerating the delivery of ULSD – Forging business partnerships and relationships Forging business partnerships and relationships – Investing EPA Investing EPA resources to accelerate market growth

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Presentation

Title	Diesel I/M Practical Solutions or Just Blowing Smoke?
Author	Peter Anyon
Publication_Name	18th Annual Mobile Sources/Clean Air Conference 9/12/2002
Reference	http://www.ncvecs.colostate.edu/cac.docs/cac18.docs/cac18pres/PAnyon.pdf
Abstract	Why Worry? = Diesel Particulates (PM) "…..long-term inhalation exposure is likely to pose a lung cancer haz to humans, as well as damage the lung in other ways depending on exposure" (EPA 2002) = Oxides of Nitrogen (NOx) - key ingredient of photochemical smog - direct health effects

Rating: 2 ***Available Electronically*** ☑ ***Fee Required*** ☐

Item_Type Report

Title ABI Distributed Generation Global Market Analysis, Technology Assessment and Outlook

Author ABI

Publication_Name ABI

Reference http://www.alliedworld.com/servlets/ResearchDetails?productid=DGN

Abstract The global power generation infrastructure is undergoing a series of changes due to shifts in the regulatory environment and the increasing commercial viability of new technologies. Energy generation is steadily movi into the hands of privately-owned enterprises and away from organizations that are directly owned or cont governments. This trend combined with the emergence of technologies such as gas turbines, reciprocating engines, fuel cells, wind turbines, photovoltaics and microturbines will create entire new markets. This repo assesses the prospects for these technologies with proper consideration of pertinent regulatory and busin issues. Market forecasts are provided for key regions/countries through to 2011. The report will aid major p generation companies and equipment manufacturers as they seek to exploit emerging opportunities in distrib generation markets.

Rating: 5 ***Available Electronically*** ☑ ***Fee Required*** ☑

Title Accommodating Distributed Resources in Wholesale Markets

Author F. Weston, C. Harrington, D. Moskovitz, W. Shirley, R. Cowart, and R. Sedano

Publication_Name National Renewable Energy Laboratory

Reference http://www.nrel.gov/docs/fy03osti/32497.pdf

Abstract Changes in electricity markets, technology, economics, and regulatory structures have created a new intere small-scale generation and efficiency resources dispersed throughout the lowervoltage networks. These "distributed" resources can provide cost-effective reliability and energy services — in many cases, obviatin need for more expensive investments in wires and central generating stations. Given the unique features o distributed resources, the challenge facing policymakers today is how to structure wholesale markets for electricity and related services so as to reveal the full value that distributed resources can provide to the sy

Rating: 5 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Air Pollution Emission Impacts Associated with Economic Market Potential of Distributed Generation in Califor

Author

Publication_Name EERE - DER

Reference ftp://ftp.arb.ca.gov/carbis/research/apr/past/97-326.pdf

Abstract This study evaluates the net air emissions effects from the potential use of cost-effective distributed genera (DG) in California. The primary objectives of the study are, first, to estimate the economic market potential fo distributed generation, and second, to determine the resulting air emissions given that level of deployment. T ultimate goal is to provide regulators and policymakers with information that will contribute to the developme strategies and policies regarding distributed generation.

Rating: 5 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Annual Energy Outlook 2003

Author

Publication_Name Energy Information Administration

Reference http://www.eia.doe.gov/oiaf/aeo/index.html

Abstract The Annual Energy Outlook 2003 (AEO2003) presents midterm forecasts of energy supply, demand, and pr through 2025 prepared by the Energy Information Administration (EIA). The projections are based on results from EIA's National Energy Modeling System (NEMS).

Rating: 5 ***Available Electronically*** ☑ ***Fee Required*** ☐

Item_Type Report

Title	CALIFORNIA ENERGY COMMISSION Distributed Generation Strategic Plan
Author	
Publication_Name	
Reference	http://www.energy.ca.gov/reports/2002-06-12_700-02-002.PDF
Abstract	This document contains recommended policies and strategies for the State of California to consider regarding the subject of distributed generation and the State's role in regard to it.

Rating: 5 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title	Can we have cake and eat it too? Creating Distributed Generation Technology to Improve Air Quality
Author	Jim Lents, Ph D
Publication_Name	University of California, Riverside, CE-CERT
Reference	http://www.ef.org/documents/DG_Emissions_Regs.pdf
Abstract	This report, titled Can We Have Our Cake and Eat It Too? Creating Distributed Generation Technology to Improve Environmental Quality by Jim Lents, Ph.D., examines DG emissions levels and recommends a framework for DG emissions regulations.

Rating: 5 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title	Comparison of the GEMSET, IPM®, and NEMS Policy Support Models
Author	R.E.Weinstein
Publication_Name	Parsons
Reference	
Abstract	Several computer-assisted modeling systems assist the evaluation of NETL technologies and strategies. These help provide the information needed assess the impacts of various policy decisions. This paper summarizes three of these models: the NETL GEMSET model, the ICF IPM® model, and the EIA NEMS model. These models have complimentary capabilities, some better for certain types assessments than others. The summaries here describe the models, and then compare the models in the following capability areas:

Rating: 5 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title	Competitive Power Market Analysis for WSCC, ERCOT, MAIN, ECAR, NPCC, SPP, FRCC, SERC, MAPP and MAAC Regions
Author	
Publication_Name	Energy OnLine
Reference	http://www.energyonline.com/reports/reportsLCG2.asp
Abstract	As the volume of electricity traded in a competitive market environment increases, the volatility of electricity follows suit, and the premium paid for price security is likely to increase. These factors have a direct implica on the value of utility's generation resources. LCG consulting has taken the initiative to make available usefu subsciption-based information on electricity price forecasts to utilities, power marketers, buyers and others. These forecasts are provided at various levels (daily, weekly, monthly, yearly) for the different companies a zones in the WSCC, ERCOT, MAIN, ECAR, NPCC, FRCC, SPP, SERC, MAPP and MAAC regions. The futures price index is the weighted average price of megawatt hour and the index is quoted in dollars per megawatt hour.

Rating: 5 ***Available Electronically.*** ☑ ***Fee Required.*** ☑

Survey_Results

Item_Type Report

Title Distributed Energy and Air Emissions: A Wild Card for the Distributed Energy Marlet

Author

Publication_Name PRIMEN

Reference http://www.primen.com/index.asp

Abstract Environmental regulations will shape markets for distributed energy for several years to come. As perceptic an energy supply crisis sharpen, many utilities, state authorities, and entrepreneurs seek to use distributed energy units — and especially existing diesel generators — to boost electric generating capacity during sup crunches. These efforts have led some regulators to ease emission requirements and allow units permitted emergency generators to run more often and during preblackout conditions.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☑

Title Distributed Generation: Technologies, Opportunities, and Participants - 1st Edition

Author

Publication_Name Energy Info Source

Reference http://www.energyinfosource.com/products/product.cfm?report_ID=7

Abstract The 1st Edition - This report is designed to assist individuals in understanding and evaluating distributed generation (DG). DG refers to different power-generating technologies --varying by efficiency, size, cost, a application-- operating close to the point of consumption. In this report we have generally focused on techn and applications of less than 1MW.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Distributed Generation: Technologies, Opportunities, and Participants - 3rd Edition

Author

Publication_Name Energy Info Source

Reference http://www.energyinfosource.com/products/product.cfm?report_ID=7

Abstract The 3rd Edition of Energy Info Source's Distributed Generation: Technologies, Opportunities, and Participant Report is a comprehensive 135-page study of the Distributed Generation (DG) industry. The report takes a v ranging look at the current and future state of DG and both individually and collectively addresses the technologies of Microturbines, Reciprocating Engines, Stirling Engines, Fuel Cells, Photovoltaics, Concentrati Solar, and Wind. The report comes in Adobe Acrobat PDF format and is available via email, CD Rom or Hardcopy for $799.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☑

Title Fuel Cell Report to Congress - February 2003

Author

Publication_Name Energy Efficiency and Renewable Energy

Reference http://www.eere.energy.gov/hydrogenandfuelcells/pdfs/fc_report_congress_feb2003.pdf

Abstract Congress has asked the Department of Energy (DOE) to prepare two reports describing the status of fuel c The Interior & Related Agencies Appropriations Conference Report (House Report 107-234) that accompani Public Law 107-63, enacted in November 2001, requests that the Department report within 12 months to the House and Senate Committees on Appropriations on the technical and economic barriers to the use of fuel c in transportation, portable power, stationary, and distributed power generation applications. It also requests the Department provide, within six months after enactment, an interim assessment that describes preliminar findings about the need for public-private cooperative programs to demonstrate the use of fuel cells in commercial-scale applications by 2012. The aim of this report is to respond to these requests.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Report

Title Making Connections Case Studies of Interconnection Barriers

Author R. Brent Alderfer, M. Monika Eldridge, Thomas J. Starrs

Publication_Name National Renewable Energy Laboratory

Reference http://www.nrel.gov/docs/fy00osti/28053.pdf

Abstract Today there is growing interest in distributed electricity generation, particularly onsite generation. This inter stimulated by the reliability, power quality, and environmental needs of business and homeowners, as well a availability of more efficient, environmentally-friendly, modular electric generation technologies, such as microturbines, fuel cells, photovoltaics, and small wind turbines.
This report documents the difficulties faced by distributed generation projects seeking to connect with the electricity grid. The distributed generation industry has told us that removing these barriers is their highest priority. The case studies treated in this report clearly demonstrate that these barriers are real. They are, in an artifact of the present electricity industry institutional and regulatory structure which was designed for a vertically integrated utility industry relying on large central station generation.

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Performance and Cost Trajectories of Clean Distributed Generation Technologies

Author Energy Nexus Group

Publication_Name Energy Nexus Group

Reference http://www.ef.org/documents/Distributed_Generation.pdf

Abstract The Energy Foundation, with support from the Pew Charitable Trusts, is managing the Clean Distributed Generation Initiative, a national effort to ensure that new distributed generation (DG) installations bring clean benefits. The Energy Foundation engaged the Energy Nexus Group to assess the cost trajectories and emis controls for distributed generation, and the factors - from economics of manufacture to technology breakthroughs - that will drive technology performance. The study estimates the range of future costs for technologies designed to meet the air emission standard described in the California Air Resources Board certification regulation

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Title Power Techologies Databook

Author

Publication_Name NREL

Reference http://www.nrel.gov/analysis/power_databook/

Abstract
1.0 Program Profiles
2.0 Technology Profiles
3.0 Electricity Restructuring
4.0 Electricity Forecasts
5.0 Electricity Supply
6.0 Electricity Capability
7.0 Electricity Generation
8.0 Electricity Demand
9.0 Prices
10.0 Economic Indicators
11.0 Environmental Indicators
12.0 Conversion Factors
13.0 Congressional Questions & Answers

Rating: 5 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Report

Title	Prospects for Adequate Supply of Ultra Low Sulfur Diesel Fuel in the Transition Period
Author	
Publication_Name	A MathPro report from Autoalliance web site. February 26, 2002 (pdf)
Reference	http://www.autoalliance.org/ulsd_study.pdf
Abstract	Economic study on the supply availability of ultra low sulfur diesel fuel commissioned by the Alliance of Automobile Manufacturers and the Engine Manufacturers Association.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title	State Electricity Regulatory Policy and Distributed Resources Distribution System Cost Methodologies for Distributed Generation
Author	W. Shirley, R. Cowart, R. Sedano, F. Weston, C. Harrington, and D. Moskovitz
Publication_Name	National Renewable Energy Laboratory
Reference	http://www.nrel.gov/docs/fy03osti/32500.pdf
Abstract	The increased availability and decreasing costs of distributed resources (DR), or small-scale generation and efficiency resources, present new challenges in the regulation of distribution utilities. A key requirement in assessing DR is a working understanding of the cost of distribution systems and of the alternative costs tha might be incurred or avoided in the absence or presence of DR. Because many of the choices to install DR v be largely decentralized, every effort should be made to reveal these costs to as many of the stakeholders possible, including distribution utilities, customers, DR purveyors, Independent System Operators (ISOs) and system planners. It is equally important to reveal these costs to regulators who are in the position to see the picture and develop appropriate policies for encouraging or discouraging DR, as necessary.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title	Stationary Fuel Cells: Is the Glass Half Empty or Half Full?
Author	Nicholas Lenssen, Dana Blum
Publication_Name	PRIMEN
Reference	http://www.primen.com/index.asp
Abstract	Two years ago, fuel cells were the darlings of Wall Street investors and seemed to be poised for widespre commercial introduction. But midway through 2002, most fuel cell companies are still struggling to launch the initial commercial products, resulting in growing skepticism from investors and a consolidation of the industry Share prices for publicly owned, dedicated fuel cell companies are at or near 52-week lows, and there's a b sense that this time may notbe different for fuel cells in their nearly 170-year history of trying to break into commercial markets.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☑

Survey_Results

Item_Type Report

Title Survey of Low-Sulfur Diesel Fuels and Aviation Kerosenes From U.S. Military Installations.

Author Westbrook, S. R.; LePera, M. E.

Publication_Name SOUTHWEST RESEARCH INST SAN ANTONIO TXTARDEC FUELS AND LUBRICANTS RESEARCH FACILITY

Reference http://stinet.dtic.mil/cgi-bin/fulcrum_main.pl?database=ft_u2&searchid=104214640224529&keyfieldvalue=ADA366036&filename=%
crum%2Fdata%2FTR_fulltext%2Fdoc%2FADA366036.pdf

Abstract In support of the Department of Defense goal to streamline procurements, the Army recently decided to discontinue use of VV-F-800D as the purchase specification for diesel fuel being supplied to continental Uni States military installations. The Army will instead issue a commercial item description for direct fuel deliveri under the Post/Camp/Station (PCS) contract bulletin program. In parallel, the Defense Fuel Supply Center (DFSC) and the U.S. Army Mobility Technology Center-Belvoir (MTCB at Ft Belvoir, VA) initiated a fuel survey assess the general quality and lubricity characteristics of low sulfur diesel fuels being supplied to military installations under the PCS system. Under this project, diesel fuel delivery samples were obtained from sele military installations and analyzed according to a predetermined protocol. The results obtained from various show that the average, low-sulfur diesel fuel meets military requirements for DF-2 with the exception of lub performance. Proposed fuel lubricity requirements for military, ground-vehicle, diesel fuels are presented.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title The Impact of Air Quality Regulations on Distributed Generation

Author Joel Bluestein, Susan Horgan, M. Monika Eldridge

Publication_Name National Renewable Energy Laboratory

Reference http://www.nrel.gov/docs/fy03osti/31772.pdf

Abstract Relatively small projects for generating electrical power at or near the point of use-distributed generation (D offer unique opportunities for enhancing the U.S. electric system. This report finds that current air quality regulatory practices are inappropriately inhibiting the development of DG through a failure to recognize the environmental benefits offered by DG or by imposing requirements designed for larger systems that are not appropriate to DG systems. The report recommends that air quality regulation be made more efficient and appropriate for DG by establishing national standards for DG equipment. This report also recommends that D projects be evaluated on a “net” emissions basis by being given credit for any emission sources that they displace. Air quality regulation should also recognize and account for the benefits of combined heat and po (CHP).

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☐

Title The New Economic Landscape for Distributed Energy

Author Jim Fay, Michael Casey

Publication_Name PRIMEN

Reference http://www.primen.com/index.asp

Abstract The restructuring of the North American electric power industry continues to affect how distributed energy developers determine their projects’ economic competitiveness. The combination of wholesale power marke opening up and retail energy users’ new options for responding to wholesale power price signals is likely to economic decisions about installing DE and choosing DE applications.

Rating: 5 **Available Electronically.** ☑ **Fee Required.** ☑

Survey_Results

Item_Type Report

Title A National Vision of America's Transition to Hydrogen Economy - To 2030 and Beyond

Author

Publication_Name DOE

Reference http://www.eere.energy.gov/hydrogenandfuelcells/pdfs/vision_doc.pdf

Abstract On November 15-16, 2001, 53 senior executives representing energy and transportation industries, univers environmental organizations, Federal and State government agencies, and National Laboratories met to disc the potential role for hydrogen systems in America's energy future. (A list of the participants can be found i appendix.) The intent of the meeting was to identify a common vision of the "hydrogen economy," the time fr in which such a vision could be expected to occur, and the key milestones that would need to be accomplis get there.
Based on the ideas and suggestions put forth by the participants during the meeting, this document present national vision for hydrogen to become a premier energy carrier, like electricity, for Americans. It will be use various stakeholders including industry, policy makers, and researchers as the coordinating foundation for formulating future actions leading to a hydrogen economy. The meeting proceedings, which include the presentations and summaries of the notes from the facilitated breakout sessions, can be downloaded at www.eren.doe.gov/hydrogen.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title Annual Technical Status Report of The Regulatory Assistance Project

Author

Publication_Name NREL

Reference http://www.nrel.gov/docs/fy03osti/32733.pdf

Abstract The objectives of RAP's work in this contract year were to develop regulatory policy options that would red institutional and infrastructure barriers to full-value deployment of distributed power systems. There are sev players in the electricity industry who could and should be able to realize the economic benefits of DR: customers, distribution utilities, DR vendors, wholesale market participants, and, of course, regulators. Beca existing regulatory systems often do allow these benefits to be realized, many who could benefit from using are either unaware of those potential benefits or, worse, would actually experience economic penalty if DR deployed. Policies are needed that can establish costs and price signals that will reveal the value of DR to th party most likely to deploy it. Regulation should provide the right incentives to reward the entity in the best po to deploy the DR.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Title California Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicl

Author

Publication_Name

Reference http://www.arb.ca.gov/diesel/documents/rrpFinal.pdf

Abstract Particulate matter emissions from diesel-fueled vehicles and engines are about 28,000 tons per year in Calif These emissions come from a wide variety of sources including over one million on-road and off-road vehic about 16,000 stationary engines, and close to 50,000 portable engines. On-road engines account for about percent of the emissions, off-road engines about 66 percent, with the remaining 7 percent from stationary a portable engines. With full implementation of the current vehicle standards on the books and vehicle turnove diesel particulate matter (diesel PM) will still be about 22,000 tons per year in 2010 and about 19,000 tons pe year in 2020.

Rating: 4 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Report

Title Costing Methodology for Electric Distribution System Planning

Author Karl E. Knapp, Jennifer Martin, Snuller Price, Frederick M. Gordon

Publication_Name Energy & Environmental Economics, Inc. and Pacific Energy Associates

Reference http://www.ef.org/documents/CostMethod.pdf

Abstract This report has been prepared for regulators, policymakers, utility managers, distribution planners and engir It describes how utilities currently evaluate Distributed Resources (DR) in planning for capital investments in distribution facilities, and suggests a pathway for enhancement of how DR is considered. DR consists of lo energy efficiency, load management, or generation. These resources can sometimes delay or eliminate the r for new distribution power lines, substations, and other equipment, at significant cost savings to the utility a consumers.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title Diesel Emission Control - Sulfur Effects (DECSE) Summary of Reports

Author National Renewable Energy Laboratory

Publication_Name

Reference http://www.ott.doe.gov/decse/pdfs/decse_summary_reports.pdf

Abstract Produced for the U.S. Department of Energy (DOE) by the National Renewable Energy Laboratory (NREL), a DOE national laboratory. This summary describes a government and industry cost-shared project to determi the impact of fuel sulfur levels on emission control systems that could be used to lower emissions of nitroge oxides (NOx) and particulate matter (PM) from compression ignition, direct injection (CIDI) diesel-cycle vehicl The sulfur in diesel fuel adversely affects the operation of diesel exhaust emission control systems. Tests conducted and data were collected and analyzed for various combinations of fuel sulfur levels, engines, an exhaust emission control systems.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title Distributed Generation: A Utility Perspective

Author

Publication_Name Newton-Evans Research Company, Inc.

Reference http://www.newton-evans.com/reports/DistributedGeneration.asp

Abstract If you need answers to these questions, this 2002 report series is a must for your market and business plan
How is the utility market for DG programs shaping up?
What is the outlook for the utility-involved DG market by year-end 2003?
Which utilities will be offering a DG program for their customers?
What criteria have utilities established for DG accounts?
Will utilities purchase DG equipment for customers and provide integration services? Who will own the equipment?
What are the principal types of DG equipment favored by utilities?
Which fuels are being used with utility-favored DG equipment?
How will DG sites be integrated with the distribution network?
What are the major concerns utility officials have related to DG?
What is the average cost per MWH used as a trigger point for dispatching DG? How will signaling of DG resources work?
What is the impact of DG on the utility grid? On transient stability?

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☑

Item_Type Report

Title Electricity Technology Roadmap Initiative 1999 Summary and Synthesis Report

Author

Publication_Name EPRI

Reference http://www.epri.com/corporate/discover_epri/roadmap/CI-112677-V1_all.pdf

Abstract The Electricity Technology Roadmap Initiative is an ongoing collaborative exploration of the opportunities and threats for electricity-based innovation over the next 25 years and beyond. Thus far, over 150 organization participated with EPRI and its members in shaping a comprehensive vision of the opportunities to increase electricity's value to society. This vision is being translated into a set of technology development destinations the R&D pathways to reach these destinations. EPRI is leading this ongoing roadmapping effort as an invest in the future, and as guidance for strengthening the value of public and private R&D investment.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title EPA's Nonroad Engine Emissions Control Programs

Author

Publication_Name

Reference http://www.epa.gov/otaq/regs/nonroad/f99001.pdf

Abstract In response to environmental and public health concerns, the U.S. Environmental Protection Agency (EPA) has established emission standards for several nonroad engine categories. The categories of nonroad engines currently being addressed by EPA cover a variety of applications, including farm and construction equipment, lawn and garden equipment, marine vessels, and locomotives. As a whole, EPA's nonroad programs will significantly reduce the impact of nonroad equipment on the nation's air quality.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Evaluation of the Effects of Biodiesel Fuel on Emissions from Heavy-Duty Non-Road Vehicles

Author Thomas D. Durbin John R. Collins Hugo Galdamez Joseph M. Norbeck Matthew R. Smith Ryan D. Wilson Ted Younglove

Publication_Name Center for Environmental Research and Technology College of Engineering University of California

Reference http://www.cert.ucr.edu/research/pubs/00-VE-20904-004-FR.pdf

Abstract Construction applications could provide an important niche for biodiesel. Construction applications often require large quantities of fuel at remote sites where fueling infrastructure for some other alternative fuels, such as natural gas, is nearly impossible. The present project was a pilot study to evaluate the potential effectiveness of biodiesel in reducing emissions from offroad vehicles. For this program, opacity measurements were conducted on 4 off-road vehicles operated on a California in-use diesel fuel, and a blend of 20% biodiesel (B20) and 30% biodiesel (B30) with this fuel. This study was conducted at the Colton landfill site in Colton, CA. An additional aspect of this program was to evaluate available technologies for measuring emissions from construction off-road vehicles.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Survey_Results

Item_Type Report

Title Fuel Cell Industry Competitive Analysis Defining the Strategies of Fuel Cell Industry Players

Author

Publication_Name ABI

Reference http://www.alliedworld.com/servlets/ResearchDetails?productid=FCIP

Abstract The fuel cell industry has been growing at a rapid pace, with new faces joining the sector every day. Fuel c have the potential to change the entire infrastructure of the world's energy industry. ABI carefully selected t companies for this research, from industry leaders to newcomers with the potential to change the industry dynamics in coming years. The companies are analyzed from technological and strategic perspectives in re to their progress in automotive, stationary and portable applications. The study assesses the companies' str alliances and their potential impact on the fuel cell industry. The major market forecasts are also included, in order to give the reader a more complete view of the industry.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☑

Title Global Stationary Fuel Cell Markets

Author

Publication_Name ABI

Reference http://www.alliedworld.com/servlets/ResearchDetails?productid=FCM

Abstract Participation in the stationary fuel cell industry has especially increased in the last two years, with a wide ra companies from different industries now involved. Rapid industry changes have affected market dynamics. particular, the needs and challenges of developing the future global energy infrastructure have changed. He the update of ABI's flagship energy study has been done with a keen eye on the competitive level of techno and developers' execution plans. Strategies of fuel cell developers are examined within the context of their targeted market segments, ranging from reliable power to the microgenerator market in underdeveloped islar The study includes quantitative forecasts from quality power to wastewater treatment plants, and from resi buildings to telecommunications relay towers. Markets are identified that show a significant potential for expansion due to the regional characteristics of countries over the next ten years. The relative importance c price of power is explored. The potential for different technologies to penetrate a number of markets that ar are not price sensitive is analyzed.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☑

Title HEAVY-DUTY TRUCKS EMISSION FACTORS DEVELOPMENT

Author

Publication_Name

Reference http://www.arb.ca.gov/msei/on-road/downloads/tsd/hdt_emissions_new.pdf

Abstract This section outlines the development of chassis dynamometer test based emission factors for heavy-duty trucks (HDDT). In the MVEI7G model, heavy-duty truck emissions were based on testing various engines on engine dynamometer rather than testing the entire vehicle on a chassis dynamometer. Basic emission rates derived from emissions test data collected during HDDT engine certification using the USEPA's heavy-duty engine transient cycle. Emissions from engine testing are expressed as grams per brake horsepower-hour, must be converted to grams per mile units for use in the emissions inventory models.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Item_Type Report

Title National Hydrogen Energy Roadmap

Author

Publication_Name DOE

Reference http://www.eere.energy.gov/hydrogenandfuelcells/pdfs/national_h2_roadmap.pdf

Abstract An energy economy based on hydrogen could resolve growing concerns about America's energy supply, s air pollution, and greenhouse gas emissions. Hydrogen offers the long-term potential for an energy system t produces near-zero emissions and is based on domestically available resources. Before hydrogen can ach promise, however, stakeholders must work together to overcome an array of technical, economic, and instit challenges.
Hydrogen has the potential to play a major role in America's future energy system. This Roadmap outlines ke issues and challenges in hydrogen energy development and suggests paths that government and industry c take to expand use of hydrogen-based energy.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Non-Technical Barriers to the Commercialization of PV Power Systems in the BuiltEnvironment

Author

Publication_Name NREL

Reference http://www.nrel.gov/docs/fy03osti/31976.pdf

Abstract Building-integrated photovoltaics (BIPV) requires institutional support to become a viable technology and a sustainable solution. Between 1990 and 2000, the solar industry demonstrated the viability of BIPV technolc installing hundreds of thousands of successful systems around the world. Architects have created award-winning, elegant solar buildings. Utility companies and municipalities have adopted this technology to augmer their infrastructure and electricity services network. The potential for BIPV is widely recognized as significa however, institutional barriers can slow its deployment.
Our research emphasizes institutional issues related to introducing and commercializing photovoltaic (PV) p systems in the built environment.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Releasing the Potential of Distributed Energy

Author

Publication_Name PRIMEN

Reference http://www.primen.com/index.asp

Abstract In June and July 2002, Primen completed 600 interviews with North American businesses ranging in size fro 300 kW to 10 MW, including 78 Canadian establishments. (See "Sample Design" on page 3 for information about the sectors queried.) We also held 30 in-depth interviews with energy users, including 10 with users were queried in our 2001 study.
Selected highlights from this major research study are listed below; the complete report provides a detailed analysis on today's market for distributed energy. For more information, please read the report prospectus a survey instrument.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☑

Item_Type Report

Title Scenarios for a Clean Energy Future

Author Marilyn A. Brown et al

Publication_Name Office of Energy Efficiency and Renewable Energy

Reference http://www.ornl.gov/ORNL/Energy_Eff/CEF.htm

Abstract This report, Scenarios for a Clean Energy Future, was commissioned by the U.S. Department of Energy's O of Energy Efficiency and Renewable Energy. It was produced by the Interlaboratory Working Group, compo of scientists from Argonne National Laboratory, Lawrence Berkeley National Laboratory, the National Renev Energy Laboratory, Oak Ridge National Laboratory, and Pacific Northwest National Laboratory. The report s to develop a better understanding of the potential for R&D programs and public policies to foster clean ener technology solutions to the energy and environmental challenges facing the nation. These challenges includ global climate change, air pollution, oil dependence, and inefficiencies in the production and use of energy. The study uses a scenario-based approach to examine alternative portfolios of public policies and technolo The policies were selected by the authors through a dialogue with numerous representatives from the priva sector, non-profit organizations, universities, and government. These policies range from expansions of lon existing programs to new policies, some of which are clearly controversial.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Shades of Green: Public Power's Environmental Profile

Author Evan Pickford

Publication_Name American Public Power Association's (APPA) DEED (Demonstration of Energy-Efficient Developments)

Reference http://www.appanet.org/pdfreq.cfm?PATH_INFO=/Newsroom/releases/Shades_of_Green.pdf&VARACTION O

Abstract This study was undertaken to determine public power's "green" pro-file. The term "green energy" is not a scientific one, rather it is part of the popular lexicon used to describe energy production and conservation measures that minimize threats to air quality. Because they are locally owned and operated, public power ut are closer and more responsive to their customer-owners. Public power utilities have long held themselves be more environmentally responsible than private power companies and rural electric cooperatives. This an supports that claim. This report compares the air quality record of public power with that of rural electric cooperatives (coops) and investor-owned utilities (IOUs).

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title Shadows in the Western Sky Impacts of Federal Multi-Pollutant Policy Proposals on Western Air Quality

Author

Publication_Name Energy Foundation

Reference http://www.ef.org/documents/shadow_final.pdf

Abstract This report analyzes the Bush Administration's Clear Skies Initiative (CSI) using computer modeling typically employed by the U.S. EPA, but with more realistic assumptions than EPA uses. The analysis finds that:
The CSI proposal does not result in the maximum cost-effective NOx controls in the West.
A rigorous regional western SO2 cap is needed to protect western air quality.
Mercury control costs will be lower than expected if a firm, well-designed western SO2 cap is in place.
The emission limitations for new coal-fired plants under CSI are much less protective than recent Best Avail Control Technology determinations in the West under the New Source Review program.
Broader penetration of new wind generation as an alternative to increased reliance on fossil-fuel power in t West is economically viable and could yield important air quality benefits.
In short, the CSI is not now structured to adequately protect the West's air quality and public health.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Item_Type Report

Title	Siting Power Plants: Recent Experience in California and Best Practices in Other States
Author	
Publication_Name	Energy Foundation
Reference	http://www.ef.org/documents/Siting_Report.pdf
Abstract	The research included a review of the laws, executive orders, rules, and procedures governing the Californ Energy Commission's (CEC's) traditional 12-month siting process, and the special expedited review process the CEC adopted to allow for 6-month, 4-month, and 21-day reviews for certain types of power plant propo The study encompassed a number of interviews with California state agency representatives, developers a process intervenors, and surveyed plant siting practices in California and other states.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	Smaller, Closer, Dirtier Diesel Backup Generators In California
Author	Nancy E. Ryan, Kate M. Larsen, Peter C. Black
Publication_Name	Environmental Defense
Reference	http://www.environmentaldefense.org/pdf.cfm?ContentID=2272&FileName=BUGsreport.pdf
Abstract	Late one Thursday afternoon in March, a massive power outage darkened much of the University of Califor Berkeley campus. Classes ended abruptly, students were herded out of darkened dormitories, and the cam server went down. But the lights did not stay off everywhere on campus. Tucked away in basements and b buildings was a secret weapon, 40 backup generators or BUGs, 29 of them diesel-fired. During the blackou but one were switched on to protect sensitive laboratory experiments, power dining facilities, and light hall Their service came at a steep cost, however. Toxic diesel exhaust from the Berkeley BUGs wafted across busy campus and into nearby residential and commercial areas. Alarmed to see plumes of smoke from exha outlets, several staff and students dialed 911.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	State Electricity Regulatory Policy and Distributed Resources: Distributed Resource Distribution Credit Pilot Programs — Revealing the Value to Consumers and Vendors
Author	
Publication_Name	NREL
Reference	http://www.nrel.gov/docs/fy03osti/32499.pdf
Abstract	The purpose of this report is to describe implementation options for two concepts: deaveraged distribution and distributed resource development zones. The concepts are closely related, and both were first describe Profits and Progress Through Distributed Resources, which was published by the National Association of Regulatory Utility Commissioners in February 2000. We believe that developing workable programs implemen these policies can dramatically increase the deployment of distributed resources in ways that benefit distrib resource vendors, users, and distribution utilities.

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Title	Status of State Electric Industry Restructuring Activity
Author	
Publication_Name	
Reference	http://www.eia.doe.gov/cneaf/electricity/chg_str/tab5rev.html
Abstract	Status of State Electric Industry Restructuring Activity -- as of December 2002 -- (Next release of data on January 1, 2003)

Rating: 4 ***Available Electronically*** ☑ ***Fee Required*** ☐

Survey_Results

Item_Type Report

Title The Internet Economy and Global Warming

Author Joseph Romm

Publication_Name Cool-Companies

Reference http://www.cool-companies.org/energy/ecomm.doc

Abstract The Internet and the New Economy are producing more than just a business revolution: They are also gener enormous energy and environmental savings. In making business more efficient, information technology is reducing the energy and materials needed for each dollar of output - often dramatically - and increasing ove productivity, the Internet stands to revolutionize the relation between economic growth and the environment Increasingly, the Net itself is being used to manage energy use directly.
Using Energy Department data, the Center for Energy & Climate Solutions has demonstrated both direct and indirect energy savings, and shown that US energy demand growth has slowed substantially since the sta Internet boom.
The findings debunk an all-too-common myth that the Internet is the cause for rising energy demand in the U. To the contrary, they believe demand would be much higher without Internet savings.

Rating: 4 **Available Electronically.** ☑ **Fee Required.** ☐

Title California Emission Model Overview

Author

Publication_Name

Reference http://www.arb.ca.gov/msei/on-road/downloads/tsd/overview.pdf

Abstract Staff previously estimated on-road motor vehicle emissions using a series of computer models called the MVEI models. The following discussion provides an overview of the emission estimating process and the computer models used. Although some technical detail is included, this discussion is intended to provide more of a qualitative understanding of the overall process. For a more comprehensive discussion of the workings of the MVEI7G model, documentation is available in “Methodology for Estimating Emissions from On-Road Motor Vehicles (Volumes 1-6), and Derivation of Emission and Correction Factors for MVEI7G.” These documents are available on the ARB's Web Page at: http://www.arb.ca.gov/msei/mvei/mvei.htm.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Title California's Proposed Regulation Order Verification Procedure for In-Use Strategies to Control Emissions fror Diesel Engines

Author

Publication_Name

Reference http://www.arb.ca.gov/msprog/mailouts/msc0202/msc0202att1.pdf

Abstract These procedures apply to in-use strategies to control emissions of particulate matter (PM) and oxides of nitrogen (NOx) from diesel-fueled diesel engines. Strategies to be evaluated by these procedures include but are not limited to, diesel particulate filters, diesel oxidation catalysts, fuel additives, selective catalytic reduction systems, exhaust gas recirculation systems, and alternative diesel fuels.

Rating: 3 **Available Electronically.** ☑ **Fee Required.** ☐

Item_Type Report

Title Comparison of Emissions for Medium-Duty Diesel Trucks Operated on California In-Use Diesel, ARCO's EC-Diesel, and ARCO EC-Diesel with a Diesel Particulate Filter

Author Thomas D. Durbin Joseph M. Norbeck

Publication_Name Center for Environmental Research and Technology College of Engineering University of California

Reference http://www.cert.ucr.edu/research/pubs/59981-final-r1.pdf

Abstract Chassis dynamometer emissions tests were performed on light-heavy-duty diesel pickup trucks as part of the ARCO Emissions Control Diesel (ECD) demonstration program. Vehicles were tested over the light-duty Federal Test Procedure (FTP) to compare emissions for different fuel/aftertreatment configurations including: ARCO ECD and ECD-1 with an Engelhard DPX filter (DPX), ECD only, and in-use California reformulated diesel (CARB) fuel only.

Rating: 3 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title Demand-Side Resources and Regional Power Markets: A Roadmap for FERC

Author Richard Cowart

Publication_Name RTO Futures: Regional Power Working Group

Reference http://www.raponline.org/Pubs/General/FERCroadmap.pdf

Abstract Customer-controlled resources can play a crucial role in creating efficient regional power markets, lowering volatility and generator market power, disciplining power costs, and improving reliability. Participants in the R Futures process have asked for a "roadmap" of actions that FERC could take to advance development of th resources. This white paper sets out that roadmap and sets the stage for discussion by RTO Futures memb and their advisors.

Rating: 3 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title Development of a Diesel Fuel Cell Truck--Phase I

Author Norbeck, J.M.

Publication_Name Final Report to SunLine Services Group and U.S. Army Tank-Automotive and Armaments Command, 00-AV-59876-022-FR

Reference http://www.cert.ucr.edu/research/project.asp?project=1

Abstract To simplify logistics, all Army ground and air vehicles in combat areas use one fuel, a heavy diesel/jet fuel. T Army has a strong interest, however, in the use of fuel cells for future ground vehicles because of their qui operation and high efficiency. Most fuel cells need pure hydrogen to operate effectively, and it is difficult to hydrogen from diesel fuel. In this project, CE-CERT worked with Hydrogen Burner Technology Inc. and ISE Research to convert a heavy-duty tractor-trailer "SuperBus" rig to electric drive and outfit it with a fuel refor capable of producing usable hydrogen from diesel fuel. SunLine Services Group and SunLine Transit provid the vehicle and tested it in transit service. Georgetown University provided technical analysis and support, a College of the Desert developed training programs for technician support of advanced-technology vehicles i field.

Rating: 3 ***Available Electronically.*** ☐ ***Fee Required.*** ☐

Survey_Results

Item_Type Report

Title Effects of Diesel-Water Emulsion Combustion on Diesel Engine NOx Emissions

Author Canfield, Alan C

Publication_Name APPLIED RESEARCH ASSOCIATES INC PANAMA CITY FL

Reference http://stinet.dtic.mil/cgi-bin/fulcrum_main.pl?database=ft_u2&searchid=104214441512143&keyfieldvalue=ADA366907&filename=%
crum%2Fdata%2FTR_fulltext%2Fdoc%2FADA366907.pdf

Abstract This study examines the effects of combusting a mixture of diesel fuel, water, and surfactant on the nitroge oxides (NOx) emissions from a compression ignition diesel engine. Extensive previous research in the literat has attributed the observed reduction of nitrogen oxide emissions to a suppression of flame temperature du quenching effects from the water, thereby reducing thermal NOx formation. The report highlights the relevar theory, operation, and design parameters of diesel internal combustion engines. Experimental procedures conducted using a Detroit Diesel 4-cylinder diesel engine are discussed. Results from testing diesel fuel witl varying ratios of water balanced with a surfactant to stabilize the emulsion are presented and discussed. T data shows significant NOx emission reduction with up to 45 percent water, by volume, in the fuel. These r are correlated with thermodynamic first law and equilibrium combustion products analyses to estimate the adiabatic flame temperature of the standard fuel and fuel-water emulsion cases. Results indicate that therma NOx is indeed reduced by quenching and flame temperature suppression, confirming reports in the literature Recommendations are given for further studies, including improving the fuel- water emulsion and considera for long-term testing.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title Evaluating Diesel Particulate Trap Technology at Noranda - Brunswick Mining Division

Author

Publication_Name

Reference http://www.deep.org/reports/41_prop.pdf

Abstract This project will investigate the effectiveness and reliability of state-of-the-art Diesel Particulate Filter Syster (DPFs) in Canadian hard rock mining environments. By using these systems, European mining and tunnelling operations have met roughly similar DPM PELs as the Diesel Emissions Evaluation Program (DEEP) would nc like to demonstrate (0.05 to 0.15 mg DPM/m3).
This is one of two complementary research proposals for projects that will take place at Noranda Mining - Brunswick Mining Division and INCO - Stobie Mine over a period of 18 months. DEEP, INCO, Noranda, and the manufacturers of DPFs and diesel engines will provide cash and in-kind contributions. By hosting the projec two separate mining companies the burden of in-kind contributions, as well as the knowledge and experien gained, can be shared. Four to five production vehicles will be tested at each mine. These vehicles will be equipped with particulate traps with different regeneration technologies as well as duty cycle logging instrumentation. Brunswick Mine will conduct measurements which will be in addition to those done at INCO.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title Fuel Cell Handbook Fourth Edition

Author J.H. Hirschenhofer, D.B. Stauffer, R.R. Engleman, and M.G. Klett

Publication_Name Parsons Corporation

Reference http://www.fuelcells.org/library/FCHandbook.pdf

Abstract Robust progress has been made in fuel cell technology since the previous edition of the Fuel Cell Handbook published in January 1994. Uppermost, polymer electrolyte fuel cells, molten carbonate fuel cells, and solid c fuel cells have been demonstrated at commercial size in power plants. The previously demonstrated phospl acid fuel cells have entered the marketplace with approximately 185 power plants ordered. Highlighting this commercial entry, the phosphoric acid power plant fleet has demonstrated 95+% availability and several uni have passed 40,000 hours of operation.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Item_Type Report

Title Hydrogen, Fuel Cells, and Infrastructure Technologies Program Education Plan Workshop Proceedings

Author

Publication_Name Energy Efficiency and Renewable Energy

Reference http://www.eere.energy.gov/hydrogenandfuelcells/pdfs/education_workshop_2002.pdf

Abstract In early 2002, participants in the National Hydrogen Energy Roadmap Workshop and Fuel Cell Report to Congress Workshop determined that education, in particular, is an appropriate and integral role for the Fede government to play in promoting hydrogen technologies.
Federal, state, and local governments, as well as academic, industry, and trade organizations have funded continue to support numerous hydrogen and fuel cell education efforts. These efforts span a wide range o activities and are intended to reach a variety of audiences. Activities in schools, for example, range from distributing toys to middle school students to offering engineering curricula to graduate students. Other effo the general public or targeted stakeholder groups have included, but are not limited to, multi-media exhibits a presentations, websites, documentary films, training centers, demonstration programs, and newsletters. A detailed list of organizations and their products and activities is included in the appendix to this report.

Rating: 3 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Title Microturbines A Market Update and Outlook

Author Nicholas Lenssen

Publication_Name PRIMEN

Reference http://www.primen.com/index.asp

Abstract Rapid growth of microturbine shipments occurred in 2000, but will the upsurge continue in 2001? Primen believes that the outlook is good over the next year and beyond, through not without some potential bumps road.

Rating: 3 ***Available Electronically.*** ☑ ***Fee Required.*** ☑

Title Mobile Source Emissions New Generation Model: Using A Hybrid Database Prediction Technique

Author Matthew Barth, Principal Investigator Theodore Younglove, Co-Principal Investigator

Publication_Name College of Engineering-Center for Environmental Research and Technology
University of California

Reference http://www.cert.ucr.edu/research/pubs/NGM_Final_Report.pdf

Abstract The U.S. Environmental Protection Agency (EPA) is developing a New Generation Model (NGM) to more accurately predict in-use vehicle emissions at the micro-, meso-, and macro-scales. One of the characteris the NGM is that it should be able to predict emissions based on data collected from in-use vehicles under ac operating conditions. By contrast, today's regulatory models are based primarily on data only from dynamom laboratories. This report describes activities conducted by the University of California, Riverside, College of Engineering-Center for Environmental Research and Technology (CE-CERT) under a data analysis "shootou conducted by the EPA. EPA provided driving and emissions data from twelve spark ignition (SI) light-duty vehicles (LDVS), twelve compression ignition (CI) heavy-duty vehicles (HDDVs), and three CI off-road vehi The data were collected using the EPA's new Portable Emissions Measurement System (PEMS). Using these data, CE-CERT's objective was to estimate emissions from three similar vehicles under actual operating conditions determined by EPA.

Rating: 3 ***Available Electronically.*** ☑ ***Fee Required.*** ☐

Item_Type Report

Title National Environment Protection (Diesel Vehicle Emissions) Measure

Author

Publication_Name Environment Protection and Heritage Council

Reference http://www.ephc.gov.au/pdf/diesel/Diesel_NEPM.pdf

Abstract Diesel vehicles make a disproportionately high contribution to NOx and particle air pollution from the transport sector. The diesel vehicle proportion of the transport fleet is increasing and this trend is expected to continue. Emissions from diesel vehicles have the potential to cause adverse health effects and detract from urban amenity.
The National Environment Protection (Ambient Air Quality) Measure 1998 provides national air quality standards for six criteria pollutants. The criteria pollutants include PM10 and nitrogen dioxide, of which diesel vehicles are a significant emission source.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title The Changing Structure of the Electric Power Industry 2000: An Update

Author

Publication_Name EIA

Reference http://www.eia.doe.gov/cneaf/electricity/chg_stru_update/update2000.pdf

Abstract The U.S. electric power industry, the last major regulated energy industry in the United States, is changing t more competitive. In some States, retail electricity customers can now choose their electricity company. Ne wholesale electricity trading markets, which were previously nonexistent, are now operating in many regio country. The number of independent power producers and power marketers competing in these new retail wholesale power markets has increased substantially over the past few years. To better support a competi industry, the power transmission system is being reorganized from a balkanized system with many transmis system operators, to one where only a few organizations operate the system. However, the introduction of new markets has been far from seamless. California, where retail competition was introduced in 1998, has problems recently. Electricity prices in some parts of the State have tripled and there have been supply prob as well. Although not as severe as California, New York's electricity market has had price spikes which ma attributable to problems in the market design. While some observers argue that deregulation should be scrap others argue that deregulation is a noble endeavor and that these problems can be solved with structural adjustments to the markets.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title The Transition to Ultra-Low-Sulfur Diesel Fuel: Effects on Prices and Supply

Author

Publication_Name EIA

Reference http://www.eia.doe.gov/oiaf/servicerpt/ulsd/preface.html

Abstract In December 2000 the U.S. Environmental Protection Agency (EPA) issued a final rulemaking on Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements. The purpose of the rulemaking is to reduce emissions of nitrogen oxides and particulate matter from heavy-duty highway engin vehicles that use diesel fuel. The rulemaking requires new emissions standards for heavy-duty highway ve that will take effect in model year 2007. "The pollution emitted by diesel engines contributes greatly to our na continuing air quality problems," the EPA noted in its regulatory announcement. "Even with more stringent he duty highway engine standards set to take effect in 2004, these engines will continue to emit large amounts oxides of nitrogen (NOx) and particulate matter (PM), both of which contribute to serious public health probl in the United States."

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Survey_Results

Item_Type Report

Title ULS GASOLINE AND DIESEL REFINING STUDY

Author Purvin and Gertz Inc

Publication_Name EC, DG Environment. November 17, 2000 (pdf)

Reference http://europa.eu.int/comm/environment/sulphur/uls.pdf

Abstract A Purvin & Gertz study provides an analysis of investment requirements and operational changes required t move from 50 ppm sulfur gasoline and diesel to 10 ppm gasoline and diesel in the EU.

Rating: 3 **Available Electronically** ☑ **Fee Required** ☐

Title California's Diesel Risk Reduction Program Diesel Mobile Programs

Author

Publication_Name

Reference http://www.arb.ca.gov/diesel/mobile.htm

Abstract The Air Resources Board (ARB or Board) identified particulate emissions from diesel-fueled engines (diesel as toxic air contaminants (TACs) in August 1998. Following the identification process, the ARB was require law to determine if there is a need for further control, which moved us into the risk management phase of th program

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title EMFAC2002 Major Revisions Summary

Author

Publication_Name

Reference http://www.arb.ca.gov/msei/on-road/latest_revisions.htm

Abstract This page summarizes the major revisions associated with the development of EMFAC2002. Each major revi has a brief description, background information, resulting inventory effects, detailed technical documentatior a staff contact.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title Sunoco Transportation Fuels

Author Helen M. Doherty

Publication_Name SUNOCO

Reference http://www.sunocoinc.com/market/transportation_fuels.htm

Abstract There are many challenges for U.S. refiners to produce fuels that comply with environmental regulations an meet vehicle performance requirements. Refiners must also anticipate the fuel performance requirements fo future vehicle technology. Below is a review of gasoline and diesel regulations and current vehicle/engine performance requirements as well as projected requirements for future technology.

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐

Title WELL-TO-WHEEL EFFICIENCY For alternative fuels from natural gas or biomass

Author Peter Ahlvik and Åke Brandberg, Ecotraffic R&D3 AB

Publication_Name Ecotraffic R&D3 AB, October 2001

Reference http://www.vv.se/publ_blank/bokhylla/miljo/2001_85/2001-85.pdf

Abstract A report prepared for the Swedish National Road Administration. Diesel hybrids and fuel cell hybrids score h in this comprehensive comparison of energy efficiency for a number of fuels and powertrain configurations

Rating: 2 **Available Electronically** ☑ **Fee Required** ☐